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EFFECTS OF PUBLIC LAW 480 SURPLUSES ON ECONOMIC DEVELOPMENT  
WITH SPECIAL REFERENCE TO TAIWAN

by

YU-HSIN KAO

A THESIS

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## ABSTRACT

Since the early 1950's agricultural surpluses have been accumulating in some developed countries, particularly in the United States. On the other hand, many underdeveloped countries suffer from a chronic shortage of agricultural commodities. There has been much discussion regarding the problem of surplus farm products, and of the ways that these surpluses might be disposed of. One of the proposed solutions is to use the surpluses for assisting economic development in underdeveloped countries. In recent years, however, several economists have warned that large-scale shipments of surplus commodities to underdeveloped countries would eventually retard their agricultural development. This study surveys the effects on recipient countries of agricultural surpluses disposed of by the United States under Public Law 480, with special reference to Taiwan.

The analysis indicates that if correctly handled, farm surpluses will contribute to economic growth. The essential factor is the utilization of surpluses as a means of putting more labor to work on capital formation projects. Wages can be paid either in local currencies obtained from the sales of surplus commodities, or directly with agricultural surpluses themselves. In addition, since imported surpluses represent additional goods, they lessen inflationary pressures which are common to most underdeveloped economies. But, in evaluating the effectiveness of agricultural surpluses in economic development, commodity aid is found to be inferior to dollar aid. Empirical studies of India, Japan, Israel, Colombia, and Pakistan fail to show that surplus commodities hampered agricultural production in these countries. Substitution of surplus commodities for commercial imports has occurred in several recipient countries, but this has been relatively unimportant. The outstanding contribution of surplus commodities to development has been their counter-inflationary effects in the receiving countries. However, increases in national income attributable to the utilization of these surpluses is relatively minor.

With regard to Taiwan, food production has increased despite the inflow of farm surpluses under Public Law 480. The addition of the surplus commodities to Taiwan's domestic supply helped restrain inflationary pressures which were rampant earlier. This study also disclosed that the surplus commodities freed domestically-produced rice for export to Japan, and this has greatly lessened Taiwan's balance of payment problem with Japan.

Without a change in consumption patterns, Taiwan's absorptive capacity for surplus commodities will remain at the present level of around US\$20 million a year. In order to use these surpluses more efficiently, this study indicates that utilization of surplus commodities needs to be incorporated into an over-all economic plan.



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Yu-hsin Kao



# REPORT

REPORT OF THE COMMISSIONER OF THE GENERAL LAND OFFICE  
IN RESPONSE TO A RESOLUTION OF THE HOUSE OF COMMONS  
PASSED ON THE 12TH MARCH 1881  
RELATIVE TO THE LANDS BELONGING TO THE  
CROWN IN IRELAND  
AND  
THE LANDS BELONGING TO THE  
CROWN IN SCOTLAND  
AND  
THE LANDS BELONGING TO THE  
CROWN IN WALES AND MOUNTAIN  
DISTRICTS

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## CHAPTER I

### INTRODUCTION

There is no hard and fast basis for distinguishing between "developed" and "underdeveloped" countries. The so-called advanced or developed countries continue to develop further, while some of the underdeveloped countries are beginning to grow, while others still appear to be stagnant. Different authorities have attempted to make the distinction between developed and underdeveloped countries on various bases, but most have attempted to make the distinction on the basis of income, and this is probably the most meaningful classification. However, due to the difficulty of converting currencies which are not freely convertible, any classification must therefore be more or less arbitrary. For our purposes the following countries are considered to be developed: all European countries (including the U.S.S.R.), but excluding Spain, Portugal, Greece, Yugoslavia, Albania, Bulgaria, and Romania; Australia; New Zealand; Japan; the United States, and Canada. All the rest are regarded as underdeveloped.

Walter Krause tries to distinguish between developed and underdeveloped countries in the following manner.

An underdeveloped country can be defined as one that, on the average, affords its inhabitants an end product of consumption and material well-being inferior to that being pro-





vided in developed countries. Conversely, a developed country becomes one that affords an economic end product superior to that of underdeveloped countries.<sup>1</sup>

This definition adds nothing. It merely states that countries which are not developed are underdeveloped, and that developed countries are not underdeveloped. Gunnar Myrdal showed the difficulty in using income as a criteria in the following:

The statistics underlying such comparisons of national income per head in different countries are extremely frail, particularly those for the underdeveloped countries and can serve no other purpose than to point out the magnitude involved in the problems: a broad estimate of the number living in various degrees of prosperity or destitution. Only one who has had the opportunity of traveling widely in the rich and the poor regions, and whose eyes have been wide open to unaccustomed sights, can even begin to grasp the stark realities of the manners of living and of the human happiness or misery which are abstractly represented by such average figures.

Implied in them are differences in what and how much people can eat and the degree to which they can satisfy their hunger. Implied also is whether they have anything to wear or anything that can be called a home. Behind these base data are widely different levels of literacy and culture, standards of health and frequencies of sickness and death, how many mothers succumb in giving birth to a child and how many of the new born babies die during childhood, and also what length of life a person can expect. . . .<sup>2</sup>

Paul G. Hoffman, one-time general manager of the United

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<sup>1</sup>Walter Krause, Economic Development (San Francisco: Wadsworth Publishing Co., 1961), p. 6.

<sup>2</sup>Gunnar Myrdal, An International Economy, Problems and Prospects (New York: Harper, 1956), pp. 149-50.





Nations Special Fund, portrays a vivid picture of an underdeveloped country in the following.

Every one knows an underdeveloped country when he sees one. It is a country characterized by poverty, with beggars in the cities, and villagers eking out a bare subsistence in the rural areas. It is a country lacking in factories of its own, usually with inadequate supplies of power and light. It usually has insufficient roads and railroads, insufficient government services, poor communications. It has few hospitals, and few institutions of higher learning. Most of its people cannot read or write. In spite of the generally prevailing poverty of the people, it may have isolated islands of wealth, with a few persons living in luxury. Its banking system is poor; small loans have to be obtained through money lenders who are often little better than extortionists. Another striking characteristic of an underdeveloped country is that its exports to other countries usually consist almost entirely of raw materials, ores or fruits or some staple product with possibly a small admixture of luxury handicrafts. Often the extraction or cultivation of these raw material exports is in the hands of foreign companies.<sup>3</sup>

Most of the underdeveloped countries are to be found in Asia, Africa and Latin America. Their population accounts for two-thirds of the world's people.

### Rising Expectations

While the general picture of an underdeveloped country is characterized by poverty, this is nothing new because poverty is an old story in the world. But while the situation itself is not new, something new has arisen in recent times in the way that large

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<sup>3</sup>Paul G. Hoffman, One Hundred Countries--One and One Quarter Billion People (Washington: Committee for International Economic Growth, 1960), p. 14.



numbers of people choose to react to their poverty. The turning point in this connection came during and after World War II, marking a period for these countries sometimes labelled as "The Great Awakening." Also, many people in developed countries have altered their outlook. They have become much more aware of, and concerned with the basic situation that prevails in underdeveloped countries.

The awakening of the vast masses of underprivileged people has changed their outlook. They want more consumers' goods and higher living standards. These growing expectations have compelled the governments of most underdeveloped countries to use more and more of their resources for immediate welfare programs and for current consumption, leaving little for investment, education, and research, which are required in order to raise their productivity and ultimately their standard of living. In order to meet the increased demand for consumption goods, and for investment goods, the governments concerned have had to seek foreign aid from more-developed countries.

These developments coincided with the rise of ideological and political struggles between the Western World and the communist countries of the world. One of the effects of this struggle was for these two power blocs to try to win the friendship of the underdeveloped countries. Both sides in the cold war appear to believe that they cannot afford the hostility of the underdeveloped countries, and that in order to win their friendship it is neces-





sary to assist them in economic development.

### The Problem

In the present world there exists a paradoxical situation as regards the production and distribution of food. While in some developed countries, particularly in the United States, farm surpluses are built up and become a burden, many people in underdeveloped countries are in dire need of these commodities. The political and economic climate in the world today is probably such that people in the developed countries would probably not tolerate the destruction of such surplus food. As a result of these developments, considerable attention has been given in recent years to make the most productive use of agricultural surplus commodities. One of these has been to use the surpluses for assisting underdeveloped countries.

In 1954 the United States enacted the Agricultural Trade Development and Assistance Act (Public Law 480) which provides enabling authority for United States government agencies to dispose of farm surpluses. While the major purpose of Public Law 480 is to dispose of agricultural surpluses, it also provides for the use of agricultural surpluses in economic development. This use of surpluses was emphasized by the Food and Agriculture Organization in a pioneering study entitled, "Uses of Agricultural Surpluses to Finance Economic Development in Underdeveloped





Countries: A Pilot Study in India."<sup>4</sup> Some of the ideas and suggestions presented in this study stimulated considerable interest in both academic and governmental circles, and further proposals for the use of surpluses in economic development were later formulated and implemented.

### Objectives of the Study

During the past several years a number of studies have been made to evaluate the results of using farm surplus to promote economic development. These include studies made in India, Japan, Pakistan, Colombia and Israel. The objective of this thesis is to analyze the effectiveness of Public Law 480 in aiding economic development in these countries, with special reference to Taiwan. This includes an analysis of the effects of the program upon the economies of the receiving countries in general and Taiwan in particular, and an analysis of the problems that have emerged in using farm surpluses in economic development.

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<sup>4</sup>United Nations, Food and Agriculture Organization, Uses of Agricultural Surpluses to Finance Economic Development in Underdeveloped Countries: A Pilot Study in India, Commodity Policy Studies No. 6 (Rome: 1955).



## CHAPTER II

### CHARACTERISTICS OF UNDERDEVELOPED COUNTRIES

In analyzing problems of underdeveloped countries it is first necessary to describe their general characteristics. It needs to be emphasized that among the underdeveloped countries there are vast difference in culture, and in economic and political conditions. Because of the large number of underdeveloped countries, it is difficult to make valid generalizations applicable to all. Nor is it easy to locate a representative country. However, some outstanding characteristics are common to most of the underdeveloped countries.

#### Low Income and Low Well-being<sup>1</sup>

The outstanding feature of underdeveloped countries, and which is often singled out by economists, is the low per capita income. There is a big gap in per capita income between the highest and the lowest income country. As a generalization, two-thirds of the world's people live in underdeveloped countries but receive only about one-third of the total world income. The re-

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<sup>1</sup>The discussion of characteristics of underdeveloped countries is based on: Stephen Enke, Economics for Development (Englewood Cliffs, New Jersey: Prentice-Hall, 1963), pp. 16-39.



maining one-third, who live in the developed countries, receive two-thirds of the world's income.<sup>2</sup> However, the estimates of per capita income should not be taken too seriously. For one thing, the statistical figures released by underdeveloped countries are questionable. Also, price levels in underdeveloped countries are quite different from those in developed countries. A person with a monthly salary of \$100 in a developed country would be at a subsistence level, while in many underdeveloped countries he would be able to live quite comfortably, including several servants.

Perhaps, the most important thing is that the absolute levels of investment, saving, and production are much higher in the developed countries than in the underdeveloped areas of the world. These fundamental facts tend to cause a further disparity in the per capita incomes of developed and underdeveloped countries. For example, per capita income in the developed countries increased in excess of \$20 per head annually from 1950 to 1957, while in the underdeveloped countries per capita income rose only about \$1 per year during the same period.<sup>3</sup>

The low income levels give rise to generally low levels of social well-being. People in underdeveloped countries are seri-

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<sup>2</sup>Walter Krause, Economic Development (San Francisco: Wadsworth Publishing Co., 1961), Table 2, p. 3.

<sup>3</sup>United Nations, Food and Agriculture Organization, Development Through Food (Rome: 1961), p. 10.





ously underfed although most of their income is spent on food. Their daily calorie intake is at least one-third less than what people in developed countries consume. To make matters worse, the diets of people in underdeveloped countries consist primarily of cereals and starchy foods. They are short of vitamins, minerals, and both vegetable and animal protein, particularly animal protein.

Housing conditions in underdeveloped countries are generally at a minimum. Except in cities houses are nothing more than a crude shelter. There is generally no plumbing, electricity, or heating. Probably the most serious side effect of low income is that these people cannot afford the expenses of maintaining a school system to educate their children, and literacy rates are very low.

### The Dominance of the Agricultural Industry

Most of the underdeveloped countries have an agriculturally dominated economy. Production and employment tend to be heavily dependent on agriculture. Employment in manufacturing accounts for only a very small proportion of the total. In Asia, Africa, and in the Middle East from two-thirds to four-fifths of the population earn their living in agriculture, and in most Latin American countries from two-thirds to three-fourths of the population are engaged in agriculture.<sup>4</sup> Although there is generally some

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<sup>4</sup>Gerald M. Meier and Robert E. Baldwin, Economic Development (New York: John Wiley and Sons, 1957), pp. 274-75.





industry in these countries, it consists mainly of agricultural processing industries, production of agricultural implements, simple textile manufactures, and other light industries of minor importance.

An agricultural economy does not necessarily mean an underdeveloped economy. The economies of Australia and New Zealand are examples of relatively advanced countries which are primarily agriculturally orientated. In underdeveloped countries, however, there are a number of factors which tend to keep productivity low. One of these is the high density of rural population. People are crowded on the land, and per worker output in agriculture is very low. In addition, these may include inferior soils, inefficient land-use patterns, unskilled agricultural labor, limited supplies of capital, inefficient techniques of production, and inefficient agricultural management. Since agricultural outputs both per worker and per acre are low, underdeveloped countries have to devote most of their resource to the production of food. Until their agricultural productivity is increased these countries cannot divert many resources into other occupations because the production of food for subsistence takes priority.

The importance of industry in economic development has been emphasized by development economists who maintain that these countries are poor because they have little industry. However, the fact that there are relatively few people in industry is at least partly due to the low labor productivity in agriculture,



and this necessitates a high proportion of labor resources in agriculture. Accordingly, in many countries the most promising field for rapid economic development lies in agriculture. Jacob Viner said: "There are no inherent advantages of manufacturing over agriculture, or, for that matter, of agriculture over manufacturing."<sup>5</sup> Perhaps to improve farmers' productivity in the underdeveloped countries, thereby enabling them to produce the agricultural surplus required to sustain a larger proportion of non-agricultural employments, is more important than setting up a steel plant whose market is limited. In this connection, it is important not to confuse cause and effect.

### Population Problems

Most underdeveloped countries are confronted with another problem of economic development. This is the rapid increase in their population during the recent years. In many parts of the world population growth has been in the nature of a population "explosion." This population explosion is largely the result of a reduction in the death rate, especially of the infant mortality rate, during recent years. The crude birth rate has historically been high in these countries--around 3 per cent annually--and the reduction in the death rates has caused a rapid increase in population. If the high birth rates in these coun-

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<sup>5</sup> Jacob Viner, "Gains From Foreign Trade," in Bernard Okun and Richard W. Richardson (ed.), Studies in Economic Development (New York: Holt, Rinehart and Winston, 1961), p. 169.





tries are not checked, many will double their population within a period from 20 to 30 years.<sup>6</sup>

Because of the high birth rates in underdeveloped countries a very large proportion of the total population is in the non-working age groups because they are too young. For example, the percentage of population below 15 years of age is about 40 per cent in Asia, Africa and Latin America, but only about 25 per cent in the United States and 23 per cent in the United Kingdom.<sup>7</sup> The average expectation of life of a newborn male child is about 66 years in the United States, 67 years in Canada while it is only 32 years in India.<sup>8</sup> Because of the large proportion of children to adult workers, there is a relatively large proportion of non-producers to producers. This unfavorable age structure requires the economy to devote a considerable amount of its resources to the feeding and education of children who are not producers.

Most development economists regard the expansion of population in underdeveloped countries as one of the major obstacles to economic growth. They maintain that potential increases in population threaten to absorb increases in production. The following quotations are fairly representative of this viewpoint.

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<sup>6</sup>United Nations, Economic Commission for Asia and the Far East, Economic Survey for Asia and the Far East (Bangkok: 1962) Table 3, p. 169.

<sup>7</sup>Meier and Baldwin, Economic Development, p. 283.

<sup>8</sup>United Nations, Statistical Office, Demographic Yearbook, 1961 (New York: 1961), Table 24, pp. 622-41.





In sum, population growth operates in four ways to retard the betterment of man's material condition. First, it increases the pressure of numbers upon a nation's land and resource equipment as of any given time. Second, it tends to accentuate this pressure through time by accelerating the rate at which the store of exhaustible and non-replaceable natural resources is used up and the costs of their use are increased. Third, it diminishes the rate at which capital can be accumulated, and this diminution is greatly accentuated when, as is the case in most overpopulated countries, much potential capital is utilized in maintaining for a few years children who eventually die before they reach a productive age. Fourth, given the rate of capital formation, the rate at which the equipment of the labor force can be increased is reduced.<sup>9</sup>

Because of recent advances in public health and attendant reductions in crude birth rates, population is increasing most rapidly in the poorest countries. A doubling of population every 30-odd years, combined in many countries with diminishing returns on labor and capital, can only offset government programs to raise per capita incomes. And a great deal of foreign assistance, whether it takes the form of technical advices, or food shipments, accomplishes little more than keeping additional people alive at the same miserable consumption levels.<sup>10</sup>

### Disguised Unemployment

From the standpoint of economic development, the major significance of the population growth in the most underdeveloped countries is that labor is an abundant factor. Overpopulation usually gives rise to both unemployment and underemployment.<sup>11</sup>

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<sup>9</sup>J.J. Spengler, "The Population Obstacle to Economic Betterment," American Economic Review, Papers and Proceedings (May: 1951), pp. 350-51.

<sup>10</sup>Enke, Economics for Development, p. 355.

<sup>11</sup>The term "underemployment" is synonymous with "disguised unemployment."



In an agricultural society underemployment seems to be more common than unemployment.

Disguised unemployment implies that with unchanged techniques in agriculture, part of the labor force engaged in agricultural production could be removed without reducing agricultural output. Disguised unemployment is usually associated with family employment in peasant communities. In an overpopulated area the farm plot of a family may already have enough or more than enough workers on it. But frequently, as the farmers' children grow up they remain to work on the family farm because of a lack of job opportunity outside of agriculture. Their labor contribution contributes only little (if any) to production, but the extra workers share equally in the limited real income of the farm families. They may all be occupied, and no one may consider himself idle. Yet the fact remains that a certain number of the labor force on the land could be dispensed with without making much difference to total output.

While disguised unemployment has its roots in overpopulation in agriculture, it is also true that many agrarian people in underdeveloped countries don't have much initiative to work. They are easy to satisfy. If they are paid more, or if they have bumper crops, they tend to work less. A backward sloping labor supply curve is probably relevant in many instances.

There are probably several reasons why people in underdeveloped countries do not work hard. For one, the traditional





culture plays an important role. The system of sharing output within a peasant family may reduce personal incentive to produce more. For another, money does not have as much utility for agrarians as it does for urbanized people because there are not many commodities in a village market for rural people to want and purchase. According to one well-known writer, "Once the peasant has enough to feed the family for the year, pay his taxes and his debts, and make a few improvements to his holdings, extra money earnings mean less than Westerners subjected to advertising might suppose."<sup>12</sup>

Quantitative measurement of disguised unemployment is difficult, and different observers differ in their estimates of its extent. According to a United Nations report between 20 and 25 per cent of the population in India and Pakistan is under-employed.<sup>13</sup> It is generally estimated, however, that in densely populated areas perhaps as much as 25 per cent of agricultural labor could be withdrawn without significantly diminishing agricultural output.<sup>14</sup>

Since the 1940's the concept of disguised unemployment has been made one of the cornerstones of several theories of economic

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<sup>12</sup>Enke, Economics for Development, p. 362.

<sup>13</sup>United Nations, Department of Economic Affairs, Measures for the Economic Development of Underdeveloped Countries (New York: 1951), p. 9.

<sup>14</sup>N.S. Buchanan and H.S. Ellis, Approach to Economic Development (New York: Twentieth Century Fund, 1955), p. 45; R. Nurkse, Problems of Capital Formation in Underdeveloped Countries (Oxford: Basil Blackwell, 1953), p. 35.



growth in underdeveloped countries.<sup>15</sup> However, opposition to this view has also been expressed. For example, J. Viner and G. Haberler among others, deny the existence of the phenomenon. T.W. Schultz states that he knows of "no evidence for any poor country anywhere that would even suggest that a transfer of some small fraction, say, 5 per cent, of the existing labor force out of agriculture, with other things equal, could be made without reducing its production."<sup>16</sup> As against these views, Rosenstein-Rodan believes that disguised unemployment of more than 5 per cent exists in many underdeveloped countries.<sup>17</sup>

### Dual Economy

Underdeveloped economies are dual in their economic structures. A modern market or money sector and a traditional subsistence sector exist side by side.<sup>18</sup> The market-money sector

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<sup>15</sup>Those people who hold this view include W.A. Lewis, H. Singer, R. Nurkse and P.N. Rosenstein-Rodan.

<sup>16</sup>T.W. Schultz, "The Role of Government in Promoting Economic Growth," in L.D. White (ed.), The State of Social Science (Chicago: University of Chicago Press, 1956), p. 375.

<sup>17</sup>P.N. Rosenstein-Rodan, "Disguised Unemployment and Underemployment in Agriculture," FAO, Monthly Bulletin of Agricultural Economics and Statistics, VI (July/August, 1957), p. 1.

<sup>18</sup>As a matter of fact, dualism is not a special feature of underdeveloped countries. Even the most advanced countries, such as Canada and the United States, have areas in which standards of economic and social welfare are low, and in which techniques lag behind those of advanced areas.





exists in cities and in their suburban areas. These cities are primarily industrial-urban in composition. They are often seaports or railway terminals. Government offices, big department stores, movie theaters, as well as educational institutions are generally located in these centers. More important is that an emerging middle class, including merchants, officials, teachers, doctors, lawyers, and white collar workers, is given an opportunity to develop in these urban centers,

In the market-oriented sector money is the medium of exchange. People work for wages, and items of consumption are purchased in the market place. This makes specialization of production possible, as contrasted with the peasant agricultural economy where there is a much greater degree of self-sufficiency. The labor supply in the market-oriented sector of the economy is generally adequate because wages are high enough to attract labor from the surrounding agricultural areas. The food supply for these centers comes largely from the surrounding areas, as does most of the industrial raw materials required in the industrial areas. Of course, these market centers also trade with foreign countries. They import industrial products and export handicrafts, special local products, or minerals.

The other part of traditional societies is the subsistence sector. In underdeveloped countries a large proportion of land and labor resources are devoted to subsistence production. However, even in the subsistence sector the affairs of the peasants have



been touched by the money economy, and its effect is felt in every village, but in varying degrees.

In the absence of various disasters, the subsistence sectors are usually self-sufficient in regard to their food supply. Also, in certain areas cloth may be woven with hand weaving machines. Village blacksmiths can supply simple agricultural implements. From an economic standpoint, it is important that barter is still being carried on. For example, land rent is usually paid in grain, sometimes even debt is repaid in agricultural commodities. The market sector and the subsistence sector are connected by middlemen shuttling between the two sectors. They generally trade grain to the cities and bring back money or light industrial products. While the peasants generally distrust them, they perform a very essential service.

### Uneconomic Culture

In recent years it has been realized that a country's traditional culture plays an important role in its economic development, and that the cultural patterns of underdeveloped countries are far different from those of the developed countries. The prevailing cultures in most underdeveloped countries are considered uneconomic, as far as development is concerned; that is, their traditional cultural patterns tend to discourage the full utilization of both human and other resources. The rising expectations for higher living standards in underdeveloped countries conflict with the





desire to maintain traditional cultures, and their traditional way of life.

In most underdeveloped countries superstitions are widespread. People believe that the success or failure of any enterprise is greatly dependent on the likes or dislikes of some supernatural being. For example, drought may be regarded as a revenge of the "water god" who was offended by somebody, and in order to obtain rain, an offering must be made to placate the angry god, or spirit. In most traditional societies a great deal of money and time is spent on activities of this sort, activities which are not in the least productive. Moreover, superstitious beliefs lead people to accept the status quo. They do not think there is much possibility that man can make nature serve him, or to control or modify nature. A Chinese proverb that "satisfaction is happiness" represents this sort of feeling. Since they believe that there is not much to be done, they hope for a better life in the next world.

Another important aspect is that the way up the "social ladder" is different. While in the United States, and in other developed countries, the most common method of establishing one's "status" is through success in business, which in turn is measured in dollars. In underdeveloped countries status based on inherited wealth is more desirable than earned income. People who inherit land are always respected, but merchants who earn their own money are generally not respected. A man's social position is also related to the occupation which he is in. Manual labor, even





highly skilled work, is usually despised, but government positions, scholars, or the priesthood are highly valued. Such a culture tends to discourage the development of entrepreneurship which has played a very important part in the development of the Western World.

Another aspect of traditional societies is related to the family's role. In the Western World a family consists only of parents and their children. But big families are often to be found in most underdeveloped countries, consisting of three or four generations. With such traditions, a married son generally lives with his parents, brothers, and sisters, who all live in the same house. In the meantime, they share their family's resources. This kind of family organization has some advantages for the individual. For example, it provides a sort of insurance against illness and old age. But it tends to discourage individual incentive to work because the family pools all income together, and it also tends to encourage high birth rates. The major disadvantage of this system is that it inhibits social and economic change.

The fourth point is that people in underdeveloped countries follow traditional methods of production, and actually resist all changes. They do as their ancestors did. They are reluctant to accept new methods of doing things because the old way has been accepted for a long time without any doubt. Moreover, it is well known by traditional societies that change involves risk. Those



who live at a subsistence level can hardly afford a change if there is a risk involved.

The last point is concerned with the use of money. In under-developed countries the use of money is comparatively limited, compared with its use in developed countries. This is because of the self-sufficient nature of production and consumption. Some commodities, even if they were available, would be of no use because of a lack of certain public utilities. For example, a bulb for an electric lamp would be useless without electric power. Under such circumstance, people tend to produce for direct consumption.

All the cultural factors we have mentioned above play a negative part in the course of economic development of the under-developed countries. In order to accelerate their economic growth, these cultural barriers must be overcome. "No nation can have a drastically more productive economy and preserve its old ways of life."<sup>19</sup> However, cultural patterns are highly resistant to change, and unless new cultural values develop and take the place of displaced values, social disorder will likely result. This must be taken into account in formulating economic policies for economic development.

### The Vicious Circle

As discussed above, there are many obstacles to economic de-

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<sup>19</sup>Enke, Economics For Development, p. 34.



velopment in underdeveloped countries. They are closely related and are both the cause and consequence of poverty. All of them can be included under the general term "vicious circle." This term refers to a circular relationship which tends to perpetuate economic backwardness in underdeveloped countries. The concept of a vicious circle is ably stated by Nurkse in the following:

It implies a circular constellation of factors tending to act and react upon one another in such a way as to keep a poor country in a state of poverty. Particular instances of such circular constellations are not difficult to imagine. For example, a poor man may not have enough to eat; being under-fed, his health may be weak; being physically weak, his working capacity is low, which means that he is poor, which in turn means that he will not have enough to eat; and so on. A situation of this sort, relating to a country as a whole, can be summed up in the trite proposition: 'A country is poor because it is poor.'<sup>20</sup>

In an underdeveloped economy there may be many overlapping circles, but they vary in their significance. As Hirschman has stated, "While all development circles are vicious, some are more vicious than others."<sup>21</sup> Perhaps the most important is the one that inhibits the accumulation of capital, including human capital in the form of education. It is noted that well over half of the population in underdeveloped countries is engaged in agriculture. The people are generally uneducated, unskilled, and underfed. They have little capital equipment and are governed by habit and custom.

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<sup>20</sup> Nurkse, Problems of Capital Formation in Underdeveloped Countries, p. 4.

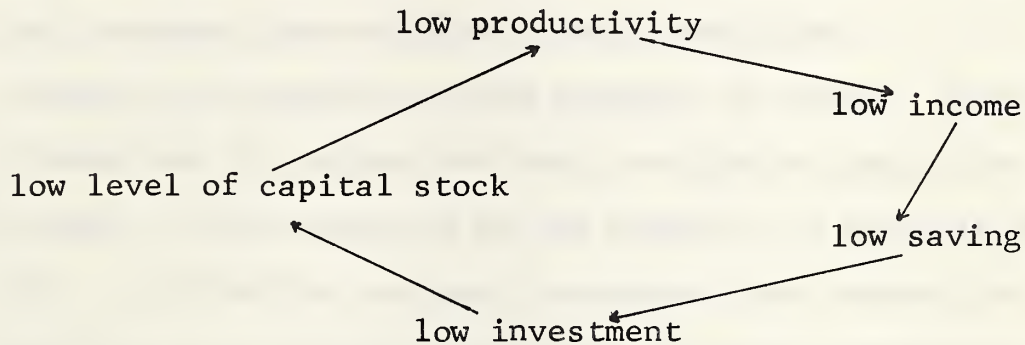
<sup>21</sup> A.O. Hirschman, The Strategy of Economic Development (New Haven: Yale University Press, 1958), p. 11.







In the meantime, the population is expanding faster than ever before. The net result is low productivity per person. Because of low productivity, the level of per capita income is low. Since people spend most of the income they earn, there is little left for saving. Small savings mean low investment, and consequently a low level of capital stock. In turn, capital deficiency results in low productivity. Thus a circle is complete. The interrelationships are shown in the following diagram.



Two major ways have been proposed for breaking out of the vicious circle. First, a vicious circle is regarded as a complex of clearly intertwined factors, with each factor having equal weight. Based on this notion, the way to break a circle is either to launch an over-all attack, through both economic and non-economic means, or to make a selective attack upon some factors. The second notion assumes that there is a key factor within the complex. Thus the effort to break out of the circle should be directed to the key factor. Once the chosen factor has been overcome, the whole situation should become better through a chain



reaction. However, this does not mean that other factors are not important. What it does mean is that one factor can be used as the primary means to shake loose the whole complex.

### Characteristics of Taiwan's Economy<sup>22</sup>

Taiwan is an island of 13,885 square miles. Two-thirds of its area is covered by mountains and foothills, leaving less than one-third suitable for cultivation. Taiwan has a subtropical climate, ample rainfall, abundant forest resources, a long coastline, and abundant hydro-electric power resources.

Taiwan is a province of the Republic of China. Before the end of World War II, Taiwan had been occupied by Japan for a period of 50 years. It was restored to the Republic of China in October, 1945. In 1949 the National Government was removed to Taiwan as a result of its military failure in fighting communists on the mainland of China.

The population of Taiwan increased rapidly in recent years. This has been due to a high rate of natural population increase on the one hand, and to the large inflow of refugees from the mainland in 1949. By the end of 1961 Taiwan had a population of 11,703,000, including servicemen. It is currently increasing at a rate of about 3.5 per cent annually. With a population density of 843 to the square mile, Taiwan is one of the most densely pop-

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<sup>22</sup>Unless otherwise noted, all data in this section are from the China Yearbook, 1961-1962 (Taiwan: China Publishing Co., 1962).



ulated areas in the world. Not only has the population increased rapidly, but it has also caused an unfavorable age distribution. It is currently estimated that about 45 per cent of the total population is below 15 years in age. This indicates that nearly one-half of Taiwan's population is too young for productive work. Due to the rapid population increase, unemployment is a serious problem. Statistics issued as of June, 1963, by the Provincial Government of Taiwan, show that 13.7 per cent of the labor force was unemployed.<sup>23</sup>

Despite strenuous efforts to promote industrialization, Taiwan's economy remains predominately agricultural. Over 50 per cent of its total population is engaged in agriculture. More than one-third of the net national income originates in agriculture, and the per capita income in agriculture is much lower than in other occupations. In addition to providing food for domestic consumption, agricultural products are the major export items, and also provide raw materials for industries. Agricultural processing industries constitute the major part of the industrial sector in Taiwan.

Taiwan is a relatively poor country. Its gross national product (in terms of current New Taiwan dollars) was estimated at NT\$66,600,000,000 (US\$1,665,000,000) in 1961.<sup>24</sup> The national in-

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<sup>23</sup>Taiwan Provincial Government, Accounting Bureau, Monthly Statistics (Taiwan: July 1963, in Chinese), p. 9.

<sup>24</sup>NT\$ stands for New Taiwan dollar. The equivalent of U.S. dollars is calculated according to the current exchange rate which is at US\$1 to NT\$40.





come was NT\$53,725,000,000 (US\$1,343,125,000) in 1961, and per capita income amounted to NT\$4,591 (US\$114.70).<sup>25</sup>

The trend in national expenditures continues upward. Government expenditures have continued to expand as a result of heavy military outlays, and private consumption shows no signs of slowing down. There is a strong preference for imported goods compared to demand for equally adequate domestically produced goods. Since people are still governed by old customs and superstitions, a sizeable part of private expenditure is expended for the purchase of offerings for Gods. These factors help to explain the failure to accumulate enough funds for economic development. As a result, Taiwan has had to place a heavy reliance on United States aid, and other foreign assistance, for financing economic development.

### Agriculture

Taiwan at present has 2.2 million acres of cultivated land. This is equal to 25 per cent of its total land area. Centuries of habitation and the accompanying exploitation of the cultivable land have left little land still capable of being made arable. Like most underdeveloped countries, Taiwan's agriculture is characterized by farms of a small size, large family units, and the high labor inputs per unit of land. Principal crops of Taiwan consist of rice, sugarcane, sweet potatoes, pineapples, bananas and tea. The livestock population is largely composed of water buffa-

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<sup>25</sup>The Executive Yuan, Accounting Bureau, National Income, 1961 (Taiwan: 1963, in Chinese), p. 5.



loes and hogs.

The bulk of the rice crop is generally retained by farmers to provide food for their families, and to barter for commercial fertilizer, leaving about 39 per cent for sale in the market.<sup>26</sup> By contrast, crops such as sugarcane, pineapples, bananas and tea are produced almost entirely for sale by the farmers. The proportion of agricultural products entering commercial channels in Taiwan is higher than in other underdeveloped countries. Bartering rice for commercial fertilizer is of special significance in Taiwan. Practically all of the fertilizer requirements of farmers in Taiwan is supplied by a government monopoly in exchange for rice. The rate of exchange varies with the different kinds of fertilizer. This system has two advantages: first, it assures the farmers of steady supply and second, by maintaining a relatively low resale price, the government is able to maintain a comparatively stable rice price. Part of this rice is also distributed among military personnel and civil servants.

Over the last decade agricultural production patterns have remained relatively stable, although a trend towards the production of more food for domestic consumption rather than for export has become evident. Except for the short-run downward movement of output during World War II, agricultural production in Taiwan

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<sup>26</sup>S.C. Hsieh, "Current Situation, Problems and Future of Taiwan's Agriculture," Proceedings of Agricultural Economics Seminar (Taiwan: National Taiwan University, 1959), p. 24.



followed a long upward trend from 1910 up to the present. However, beginning with the end of World War II, per capita production has been declining because population has increased faster than total production. The increase in total agricultural output has largely been due to technological innovations and increased capital inputs. The increased capital inputs have largely been in the form of fertilizer, pesticides, and improved seeds. Because of a relatively high level of capital inputs, and because of the widespread practice of multiple cropping, in addition to well-developed irrigation practices, the total production per unit of land in Taiwan is among the highest in the Far East, ranking second only to Japan.<sup>27</sup>

The relatively advanced state of agriculture in Taiwan is due to a number of causes. First, farmers in Taiwan are more progressive than farmers in other underdeveloped countries, and are ready to accept new methods of cultivation. Second, domestic agricultural experiments have made great contributions to Taiwan's agriculture. For example, the development of the new sugarcane strain "NCO 310" has greatly increased the production of sugar. Finally, Taiwan's land reform program, which has won international acclaim, has both improved the standard of living of farmers and

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<sup>27</sup>The multiple cropping index for Taiwan is close to 2.0. It represents the number of crops grown on arable cropland per year.







enhanced their incentive to increase production.<sup>28</sup>

### Industry

During the early stages of Japanese occupation (beginning in 1895), industry in Taiwan was limited to sugar refining, pineapple packing, and the processing of other farm products. Later, certain chemical industries, and a few other industries such as petroleum refining, aluminum and steel production, and ship-building were developed. But compared to agriculture, the industrial development was minor. Indeed, during the 50 years of Japanese occupation more progress was made in agriculture than in industry.

With the restoration of Taiwan to China in 1945, the pattern of industrial development changed. Although industry is still dominated by farm-product processing, many new industries have been

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<sup>28</sup>The land reform in Taiwan was carried out in three stages: rent reduction, sale of public lands, and the land-to-the-tiller program. According to the "Land-to-the-Tiller Act", which was enacted in 1953, each landlord was permitted to retain not more than three hectares of paddy land or six hectares of dry land that he leased to tenants. All excess acreage over this maximum retention limit was purchased by the government and resold to tenant farmers. Allowable retentions are proportionally smaller for the better grades of land, and larger for the poorer grades. Land under joint ownership is subject to purchase by the government, except under certain limited conditions. Churches owning land are allowed to retain twice the amount permitted to an individual landlord. The purchase price for the land was set at 2 1/2 times the value of the average yearly main crop and was paid for by 30 per cent in government enterprise stocks and 70 per cent in land bonds. The latter bear interest at the rate of 4 per cent per annum and shall be redeemable in 20 equal semi-annual installments including interest.

The tenant land that was purchased by the government was resold to the tenants. The resale price was the same as the government purchase prices and bears interest at the rate of 4 per cent per annum. Beginning with the season in which the land is resold, the purchaser shall pay the price and its interest in 20 equal semi-annual installments.



established. There has been a rapid expansion in the production of fertilizer, cement, glass, aluminum, textiles, and vinyl plastic. The textile industry has been highly successful. According to official statistics, Taiwan's industrial output increased 350 per cent from 1950 to 1960.

There are two conditions favoring industrial development in Taiwan. First, Taiwan has an ample supply of power at fairly low rates. Power for industrial use costs about NT\$3 or 7.5 cents a kilowatt. Second, labor is cheap and abundant. Wages for skilled labor average about US\$2.00 per day. Also governmental policy toward industrial development has been gradually liberalized. Many government-owned enterprises were transferred to private ownership in connection with the implementation of the land-to-the-tiller program. This development is shown by the relative decline of production by government enterprises. In 1949, for example, government enterprises accounted for 72 per cent of the total industrial production, but by 1960 the government's share had fallen to 41 per cent.

Although Taiwan's industrial production has expanded rapidly during the past 12 years, it is still highly undeveloped. Most factories are small-scale. A shortage of capital and a lack of managerial and entrepreneurial ability greatly handicap Taiwan's industrial development. The shortage of capital is reflected in high interest rates. Until recently, banks paid 12 to 14 per cent interest per annum on deposits, and charged about 15 per cent on loans. The shortage of entrepreneurs is very acute. This shortage is directly





attributable to the cultural influence of the dominant agrarian society. Individuals in this type of environment tend to adapt themselves to traditional modes of living and methods of production and are generally not alert to innovation. Under such conditions it is difficult to foster a group of far-sighted entrepreneurs who are needed to introduce the innovations and to provide the leadership in economic development.

Limited export markets have also retarded industrial expansion in Taiwan. This difficulty was clearly shown during recent years when certain industries in Taiwan produced more than domestic consumption, but were unable to sell their products abroad. Taiwan's export industry, it appears, needs to adjust itself to produce cheap consumer items that are no longer being produced by Japan.

### International Trade

Agricultural exports account for two-thirds of Taiwan's foreign exchange earnings, and in this it is much like other underdeveloped countries. Sugar, rice, tea, bananas, and pineapples are the major commodities exported. In the past sugar and rice constituted the bulk of Taiwan's exports, accounting for between 70 to 80 per cent of total exports. Beginning with 1958, however, the relative importance of rice and sugar exports started to decline. The proportion of total exports accounted for by industrial exports has been increasing.

Imports consist primarily of capital goods, industrial raw





materials, fertilizers, and consumers goods. The first three of these accounted for 70 to 80 per cent of the total value of imports in 1961.<sup>29</sup> The import value of both capital and raw materials has followed an upward trend.

Relative to industrial products, the prices of agricultural commodities in international markets have been declining for the past decade. This has made the terms of trade for Taiwan less favorable because its exports are predominantly of agricultural origin while imports are heavily industrial. Using 1952 as the base year, the index of Taiwan's terms of trade fell to 87 per cent in 1961.<sup>30</sup>

During the postwar period Taiwan has consistently had a deficit in its international balance of payments. The government has tried various measures to improve the situation, but without success. This deficit has largely been offset by United States economic aid, with the remaining portion covered by capital transaction such as foreign private investment. Taiwan will likely have to depend on United States aid for some years yet before it will be able to finance all the imports required for economic development with its own resources.

#### Trend of Economic Development

With heavy population pressures and uncertainties of United

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<sup>29</sup>The Central Bank, Annual Report, 1961 (Taiwan: 1962), p. 24.

<sup>30</sup>Ibid., p. 62.



States aid, Taiwan has made every effort to accelerate its economic development, but without compromising the strength of its military forces. Since 1953 two Four-year Economic Development Plans have been completed. The Third Four-year Plan began in 1961 and is in the process of being fulfilled.

The overall goal of the first Plan begun in 1953 was to raise agricultural and industrial production, and to improve Taiwan's balance of payment position. The planned total investment was NT\$7,800,000,000 (US\$195,000,000). Actual investment by the end of the Plan amounted to NT\$6,800,000,000 (US\$170,000,000), or 87 per cent of the target. Of this figure 28 per cent was for agriculture. Investment in industries, including manufacturing, mining, power, transport and communications accounted for the remaining 72 per cent.

The Second Four-year Economic Development Plan covered the period from 1957 to 1960 and emphasized foreign trade, balance of payments, and labor intensive industries. Total investment under this Plan was set at NT\$20,000,000,000 (US\$500,000,000). The actual figure, however, reached NT\$22,100,000,000 (US\$552,500,000) in terms of 1956 prices, and exceeded the target by 10 per cent.

During the two Four-year Plans inflationary pressures lessened, and prices stabilized, and public confidence in the currency improved. These improvements in the monetary field made it possible for the Government to substitute a unitary foreign exchange rate for the long-established multiple exchange rate system. As far as



real national income was concerned (in 1952 prices), the average annual rate of growth for the eight-year period was 7.4 per cent. However, because of the rapid population growth the rate of increase in per capita income during the same period was reduced to 4.6 per cent per year. Because of the economic growth, the importance of agriculture had declined relative to the non-agricultural sectors of the economy. Agriculture, however, remains as the major source of income in Taiwan. The first two Plans, however, failed to improve the balance of payments situation and the rate of unemployment. The unemployment rate actually tended to increase.

The Third Four-year Economic Development Plan extends from 1961 to 1964, and emphasizes industrial development, especially those industries using local raw materials, including the agricultural sector. It is directed primarily to the development of water resources, development of marginal lands, and forestry and fishery resources.

The estimated capital requirements of the third Plan was made primarily on the basis of an annual capital-output ratio of 2.46, which is 10 per cent higher than the actual ratio achieved during the first two plans. On the basis of this ratio, it was estimated that to increase the GNP by NT\$20,330,000,000 (US\$508.2 million), or 36 per cent over 1961, a total investment of NT\$50,019,000,000 (US\$1,250,475,000) will be required for the four-year period from 1961 to 1964.<sup>31</sup> The NT\$50 billion required

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<sup>31</sup>Ministry of Economic Affairs, Taiwan's Third Four-year Economic Development Plan (Taiwan: 1961), pp. 26-27.







for the plan is to be obtained from domestic savings, depreciation allowance, and from foreign sources.

During the early 1950's the main objective of Taiwan's economic development was to stabilize the economy, and this was probably carried out successfully. During more recent years the emphasis was shifted from stabilization to accelerated development. The major obstacles to further economic development are the rapid population growth (which amounts to 3.5 per cent per year), heavy military expenditures, and decreasing returns in agriculture.



## CHAPTER III

### SURPLUS DISPOSAL IN THE UNITED STATES

Disequilibrating forces generated in the course of economic change have caused United States agriculture to be plagued with agricultural surpluses intermittently during the past one hundred years or so. From Colonial times to about 1850, agriculture in the United States was chiefly of a self-sufficient nature, and bountiful crops, whenever they occurred, were considered a wind-fall. But after about 1850 came world-wide technological developments both within and outside of agriculture. This raised labor productivity in agriculture well above the subsistence level, and non-agricultural employment increased. As non-agricultural employment expanded, barter became ineffective as a system of exchange, and thus use of money became widespread. When this happened the tendency towards production for exchange, instead of for consumption, was reinforced.

When the American farmer entered the market economy his well-being became intertwined with the remainder of the economy since henceforth the value of his production was determined in the market place. Since the demand for agricultural products in the aggregate is highly inelastic, an increase in supply relative to demand caused a reduction in the total value of agricultural production.



During the past century agricultural production has frequently increased faster than demand. At other times the demand for agricultural commodities declined markedly. The most unfavorable situation for farmers occurred when the supply of agricultural commodities increased and the demand for them decreased. This happened during the early part of the 1930's, and rapidly falling prices resulted. The United States government intervened on a sizeable scale and paid for the destruction of both crops and livestock in order to prevent a further collapse of agricultural prices. This was the first surplus disposal program of the United States government. This program was implemented on a relatively small scale by donations of food for relief purposes.

Another method that was used to support prices was by government storage of surplus products. The increased demand occasioned by the outbreak of World War II, however, made it possible to sell these accumulated surpluses in the open market at a profit.

In the early postwar period the demand for agricultural products was relatively high and while a few instances of surplus accumulation by the United States government appeared, these were very minor. By 1950 there was considerable evidence that the tendency towards surplus accumulation would be resumed, but at this time the Korean War broke out, and demand increased temporarily. By 1952 it was evident that agricultural surpluses were again accumulating at a very rapid rate. These continued to accumulate, and in 1954 the United States Congress passed Public Law 480, which was to inaugurate the first large-scale surplus disposal program since the 1930's.





Public Law 480

The Agricultural Trade Development and Assistance Act (also known as Public Law 480) was passed by the Congress of the United States of America in 1954.<sup>1</sup> The purposes of the Act are as follows:

. . . to expand international trade among the United States and friendly nations, to facilitate the convertibility of currency, to promote the economic stability of American agriculture and the national welfare, to make maximum efficient use of surplus agricultural commodities in furtherance of the foreign policy of the United States, and to stimulate and facilitate the expansion of foreign trade in agricultural commodities produced in the United States by providing a means whereby surplus agricultural commodities in excess of the usual marketings of such commodities may be sold through private trade channels, and foreign currencies accepted in payment thereof. It is further the policy to use foreign currencies which accrue to the United States under this Act to expand international trade, to encourage economic development, to purchase strategic materials, to pay United States obligations abroad, to promote collective strength, and to foster in other ways the foreign policy of the United States.<sup>2</sup>

Public Law 480 consists of four titles, with each designed to serve certain purposes and satisfy particular interests.

Title I

Title I of Public Law 480 authorizes the sale of United States farm surpluses for foreign currencies. According to the Act, the United States government is authorized to enter into such agreements

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<sup>1</sup>Since its enactment, the Act has been amended many times. The last amendment was made in August, 1961 and extended the Act through December 31, 1964.

<sup>2</sup>United States, Congress, Agricultural Trade Development and Assistance Act of 1954, as amended, Public Law 480, 83rd Congress (Washington: Prepared for distribution by U.S. Department of Agriculture, 1961), Section 2.



with friendly nations whenever it is deemed to be in the mutual interest of both countries. The receiving country is not permitted to resell to other countries the agricultural commodities purchased under this Act.<sup>3</sup>

Prices at which agricultural commodities are sold for foreign currencies are to be established at levels "comparable to those prevailing in the market for export sales for dollars."<sup>4</sup> These are market prices, and are reckoned according to the dollar equivalent of the foreign currencies which are exchanged for surplus commodities. The exchange rates applicable to the conversion are usually the official exchange rates of the receiving countries.<sup>5</sup>

In carrying out the sales under Title I the Act requires the use of private trade channels to the maximum extent possible. Surplus agricultural commodities for this purpose can be obtained either from the stocks owned by the Commodity Credit Corporation (CCC) or from privately owned stocks. However, the CCC is required to make funds available to exporters to finance the sale and exportation of surplus agricultural commodities, either from private stocks or from stocks of the CCC.<sup>6</sup> The CCC, according to the Act, is reimbursed with dollars appropriated for this purpose. The reimbursement is

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<sup>3</sup>Ibid., Section 101.

<sup>4</sup>United States, Congress, Sixteenth Semiannual Report of Activities Carried On Under Public Law 480, House Document No. 526, 87th Congress, 2nd Session (Washington: U.S. Government Printing Office, 1962), p. 7.

<sup>5</sup>Ibid., p. 10.

<sup>6</sup>United States, Congress, Public Law 480, op. cit., Section 102.





made in line with the cost incurred. The costs include:

. . . (1) the Corporation's investment in commodities made available for export, including processing, packing, transportation, and handling costs, (2) all costs incurred by the Corporation in making funds available to finance the exportation of surplus agricultural commodities pursuant to this title and, (3) all Commodity Credit Corporation funds expended for ocean freight costs. . . .<sup>7</sup>

Title I is by far the most important part of the Act in terms of surpluses disposed, and in terms of potential for further expansion.

## Title II

Title II enables the United States to use CCC stocks of farm products for famine relief and other assistance, including economic development. Section 201 authorizes grants of surplus agricultural commodities to any friendly nation to meet famine or other urgent or extraordinary relief requirements. This kind of food grant may even be given to needy and friendly peoples without regard to the friendliness of their governments. In 1960 this title was amended to provide grants of surplus commodities to friendly countries to promote economic development in addition to the provisions of Title I.<sup>8</sup> Such commodity grants are usually used to pay wages in kind for

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<sup>7</sup>Ibid., Section 202. As a general rule 50 per cent of all agricultural commodities exported under Public Law 480 must be shipped by United States flagships. This is in effect an indirect subsidy for the United States merchant fleet because its rates are generally above world tramp steamship rates.

<sup>8</sup>Ibid., Section 202.





work performed by needy people on relatively simple public work projects.

### Title III

Title III consists of three major provisions. Section 301 provides for disaster relief within the United States. Section 302 authorizes the use of farm surpluses held by the CCC for donation to other countries through various non-profit relief agencies. Surplus agricultural commodities distributed under this title are often those which are in danger of deterioration. Section 303 authorizes the barter of CCC stocks for strategic materials of which the United States does not domestically produce all of its requirements, and for materials required in connection with economic or military assistance programs.

All barter transactions are conducted by private United States firms under contracts made with the CCC for each barter transaction. Usually the contract authorizes the contracting firms to obtain for export any agricultural commodities which the CCC has in stock. Such contracts generally call for deliveries of the strategic materials received in payment over a period of up to two years. The price of the material is determined at the time of signing of the contract, but the price of the surplus commodities is equal to the CCC export price for these commodities at the time they are delivered to the contractors.

Activities under the barter arrangement have brought a continuous storm of protest from other agricultural exporting countries,



such as Canada, Australia, and Argentina. There were also strong indications that barter sales even competed with United States commercial exports. As a result of these complications, the rules were changed so as to prohibit barter transactions with hard currency areas. The revised rules required substantial evidence on the part of the contracting firms that their proposed barter deals would represent a net addition to world agricultural trade and consumption. This change in barter transactions has greatly displeased metal and mineral firms, as well as international commodity dealers, who claim that under the present conditions it is no longer feasible for them to enter into barter deals.

#### Title IV

Public Law 480 was amended in 1959 to include Title IV. Title IV authorizes long-term sales of surplus agricultural commodities on a long-term dollar credit basis. The major objectives of this title are to assist economic development of friendly countries and to develop markets for United States agricultural commodities. Under this title the United States government may enter into agreements with friendly nations for delivery of surplus agricultural commodities for periods as long as ten years. Credit may be extended for a period up to 20 years. Payment for such commodities shall be made in dollars with interest at such rate as the Secretary of Agriculture may determine. Payments are to be made in approximately equal annual amounts over the credit period from the date of the last delivery of commodities in each calendar year.



## Negotiation of Public Law 480 Agreements<sup>9</sup>

The initial step in negotiating Public Law 480 agreements originates either with the governments desiring to get United States surplus commodities under the provisions of Public Law 480, or with appropriate United States officials. The initial discussions are usually informal, and if it appears that there is considerable agreement between both parties, the proposal will be referred to the Foreign Agricultural Service of the United States Department of Agriculture where it will be studied in detail by a designated official known as a "program officer" and his staff. At this stage, the program officer consults with appropriate representatives of the State Department, the Agency for International Development, and possibly other interested United States agencies, depending on various economic and political issues which may be involved.

When this preliminary work is accomplished the Foreign Agricultural Service prepares an analysis of the country's proposal, indicating a schedule of suggested commodities, quantities, and the various proposed uses of the foreign currency which will be received in payment. It also prepares a draft agreement, and instructions for negotiations designed to guide United States officials

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<sup>9</sup>In this discussion the present writer is greatly indebted to Ali Ahmed Attiga, Opportunities and Problems of Using United States Surplus Food to Increase Capital Formation in Underdeveloped Countries, Agricultural Economics Pamphlet 103, Economics Department, Agricultural Experiment Station, South Dakota State College (Brookings: 1959), pp. 83-87.







in their subsequent deliberations with officials of the foreign government concerned. The agreements generally follow a standard pattern and usually include the following: (1) the value and kinds of commodities to be sold; (2) the period during which the commodities will be purchased by the importing country; (3) provisions to protect against trans-shipment of the commodities to other countries; (4) provisions to safeguard the usual marketing share of the United States and other exporting countries and provisions to prevent disrupting world prices of agricultural commodities; (5) the exchange rate at which commodities will be paid for in local currency, and the method by which payment of such currency will be made to specified United States accounts; and (6) the distribution of the acquired currency among the various uses which are authorized by the law. Usually, the draft agreement must be approved by the Interagency Committee<sup>10</sup> before it is transmitted to the United States ambassador to the country concerned for negotiation. While some of the actual negotiations may take place in Washington, in most cases they are carried out in foreign capitals.

After the agreement has been signed by both countries the importing country requests the Foreign Agricultural Service for the authorization to purchase. This will allow the use of dollar funds to finance the surplus sales. In order to facilitate and maximize

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<sup>10</sup>This committee is organized at the staff level for the purpose of coordinating operations. It consists of representatives from the Departments of Agriculture, Commerce, Treasury, State, Defense, Agency for International Development, and the Bureau of the Budget. The committee is chaired by the representative of the Department of Agriculture.



the use of private channels of trade in carrying out agreement as required by Public Law 480, public announcements are made to all interested trade firms as soon as the agreement is signed, and also later when the purchase authorization is issued. After the purchase authorization has been issued, the receiving country will be free to deal directly with the United States commercial trade for purchase of the specified surplus commodities, and the CCC is instructed to make credits available to the exporters.

The importer, whether he is a private importer or an agency of the foreign country, signs the necessary contracts with the United States exporters. Financial transactions between the two parties are carried out by designated banks in both countries. The United States bank pays dollars to the United States exporters in exchange for shipping documents as required by normal international trade practices and obtains dollars reimbursement from the CCC. The CCC receives full compensation from funds held by the Treasury Department and appropriated by the Congress for this purpose.

Once dollar disbursements are made by the CCC to the designated United States bank the foreign bank designated is required to pay the full value of the sale in terms of local currency and deposit the required sum to the account of the United States which is usually established in the central bank of the receiving country and is supervised by the Disbursement Officer in the United States embassy to the country concerned. Once the local currency is deposited in the United States account it becomes the property of the United States government. Monthly reports on the state of this





account are made to the Treasury Department. Thus the financial transaction between the two parties is complete. The local bank in the recipient country is reimbursed by the importer. The commodities imported are later sold on the local market. The above discussion on the negotiation of Public Law 480 is entirely based on the provisions of Title I. Agreements under other titles are made in a similar manner through the same official channels, but as a general rule the above procedures are simplified wherever possible.

### The Magnitude of Surplus Disposal Under Public Law 480

The most important commodities programmed under Public Law 480 are wheat, wheat flour, and cotton. Feed grains, fats and oil, dairy products, and rice were also disposed of under various titles of the law. Since the enactment of Public Law 480 in 1954 through June 20, 1962, 310 agreements or supplements to agreements under the authorization of Title I were entered into with 44 countries. The total value of the surplus commodities sold under these agreements was \$11.6 billion at estimated Commodity Credit Corporation costs, or \$8.1 billion at export market value. Not all of the commodities sold have actually been exported. Of the \$8.1 billion worth sold (at export value) under Title I about \$5.6 billion had been actually shipped from the United States as of June 30, 1962.<sup>11</sup>

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<sup>11</sup>Unless otherwise noted, all the statistical figures quoted in this section come from the United States, Congress, Sixteenth Semiannual Report on Activities Carried on Under Public Law 480, House Document No. 526, 87th Congress, 2nd Session (Washington: U.S. Government Printing Office, 1962).





It should be pointed out that not every country is eligible for receiving surplus agricultural commodities under Title I, nor are all the receiving countries eligible for the same commodities. As a matter of fact, the sales of surplus agricultural commodities for foreign currencies are concentrated in a few underdeveloped countries. Of the \$11.6 billion (at CCC cost) of farm surpluses sold through June 30, 1962, only eight countries were scheduled to receive over \$500 million.<sup>12</sup> Moreover, these few countries accounted for 75 per cent of the total. The largest recipients are India and Pakistan, accounting for 43 per cent of the total. The commodity composition, export market value, and CCC costs are shown in Table 1.

On a cumulative basis a total of \$1.1 billion of surplus commodities (CCC cost) was authorized under Title II through June 30, 1962. Of this total \$564 million was allocated for disaster relief programs, \$121 million for child feeding programs, \$92 million for refugees, \$199 million for voluntary agencies such as CARE, and \$26 million for other programs. In addition, \$139 million was provided for economic development under Title II. In general, food grants for use in economic development were used to pay wages in kind. One such project now receiving emphasis is that of helping underdeveloped countries through grants of United States feed grains to stimulate their livestock industry. The uses, estimated value and destinations of the surplus agricultural commodities programmed under Title II are shown in Table 2.

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<sup>12</sup>The eight countries are Brazil, India, Pakistan, Poland, Spain, Turkey, United Arab Republic, and Yugoslavia.



TABLE 1

COMMODITY COMPOSITION OF ALL TITLE I AGREEMENTS  
SIGNED THROUGH JUNE 30, 1962

Commodity	Unit	Approximate quantity	Export market value	Estimated CCC Cost
			(millions of dollars)	
Wheat and wheat flour	Bushel	2,469,700,000	4,058.7	6,724.2
Feed grains	Bushel	378,506,000	445.6	555.2
Rice	Hundredweight	78,287,000	447.6	740.0
Cotton	Bale	7,139,000	1,049.6	1,463.8
Cotton linters	Bale	7,000	.3	.3
Meat products	Pound	113,193,000	38.1	38.1
Tobacco	Pound	352,093,000	256.9	256.9
Dairy products	Pound	365,806,000	58.9	91.4
Fats and oils	Pound	6,060,545,000	834.8	841.8
Poultry	Pound	19,985,000	6.2	6.2
Dry edible beans and peas	Hundredweight	591,000	4.7	4.7
Fruits and vegetables	Pound	196,024,000	18.0	18.0
Seeds	Hundredweight	10,000	.4	.4
Total commodities			7,219.8	10,741.4
Ocean transportation, financed by CCC			895.8	895.8
Total, including ocean transportation			8,115.6	11,637.2

Source: United States, Congress, Sixteenth Semiannual Report of Activities Carried on Under Public Law 480 (Washington: U. S. Government Printing Office), Table 5, p. 6.



TABLE 2

CLASSIFIED PURPOSES, ESTIMATED VALUE, AND  
DESTINATION OF TITLE II PROGRAMS  
(in thousands of dollars)

Area and Country	Total	Disaster	Child feeding	Refugees	Voluntary Agency	Economic development	Other
Europe (total)	186,408	86,645	51,743	29,770	8,441	-	9,809
Austria	28,391	2,278	-	26,113	-	-	-
Czechoslovakia	1,995	1,995	-	-	-	-	-
Germany, Federal Republic	3,365	1,087	-	1,284	994	-	-
Germany, Soviet occupied	758	758	-	-	-	-	-
Hungary	13,210	13,210	-	-	-	-	-
Italy	87,803	20,192	51,743	2,373	3,686	-	9,809
Spain	3,761	-	-	-	3,761	-	-
Yugoslavia	47,125	47,125	-	-	-	-	-
Africa (total)	271,749	143,118	8,406	29,531	-	90,694	-
Algeria	6,436	6,436	-	-	-	-	-
Congo Republic	11,792	11,792	-	-	-	-	-
Dahomey	1,599	761	-	-	-	838	-
Ethiopia	9,695	8,095	-	-	-	1,600	-
Ghana	605	605	-	-	-	-	-
Guinea	1,740	1,740	-	-	-	-	-
Kenya	9,413	9,413	-	-	-	-	-
Libya	27,457	27,457	-	-	-	-	-
Malagasy Republic	29	29	-	-	-	-	-
Morocco	75,607	21,519	-	10,588	-	43,500	-
Ruanda-Urundi	4,464	4,464	-	-	-	-	-
Somali Republic	3,551	3,551	-	-	-	-	-
Sudan	10	10	-	-	-	-	-
Tanganyika	11,822	11,535	-	207	-	80	-
Togo	2,489	2,385	-	104	-	-	-
Tunisia	104,650	33,326	8,406	18,282	-	44,676	-
Uganda	390	-	-	390	-	-	-





TABLE 2--Continued  
(in thousands of dollars)

Area and Country	Total	Disaster	Child feeding	Refugees	Voluntary Agency	Economic development	Other
Near East and South Asia (total)	329,097	271,112	-	31,791	1,463	24,731	-
Afghanistan	41,756	20,084	-	-	-	21,672	-
Ceylon	9,289	9,289	-	-	-	-	-
Cyprus	16,074	16,074	-	-	-	-	-
Greece (Crete)	3,577	3,577	-	-	-	-	-
India	9,220	5,807	-	-	1,463	1,950	-
Iran	20,173	19,064	-	-	-	1,109	-
Jordan	34,957	34,957	-	-	-	-	-
Lebanon	16,795	16,795	-	-	-	-	-
Nepal	3,689	3,689	-	-	-	-	-
Pakistan	48,614	48,614	-	-	-	-	-
Syria	27,533	27,533	-	-	-	-	-
Turkey	27,680	27,680	-	-	-	-	-
U.A.R. - Egypt	29,100	29,100	-	-	-	-	-
UNRWA (Palestine refugees)	31,791	-	-	31,791	-	-	-
Yemen	8,849	8,849	-	-	-	-	-
Far East and Pacific (total)	82,534	18,614	36,747	726	3,255	23,192	-
Cambodia	2,343	2,343	-	-	-	-	-
China, Republic of	8,804	2,606	-	-	321	5,877	-
Hong Kong	1,014	-	-	-	1,014	-	-
Japan	36,992	245	36,747	-	-	-	-
Korea	22,138	2,925	-	-	1,898	17,315	-
Laos	839	839	-	-	-	-	-
Ryukyu Islands	8,330	8,330	-	-	-	-	-
Vietnam	2,074	1,326	-	726	22	-	-
Latin America (total)	69,312	44,355	24,251	-	-	706	-
Bolivia	17,544	17,428	-	-	-	116	-



TABLE 2--Continued

(in thousands of dollars)

Area and Country	Total	Disaster	Child feeding	Refugees	Voluntary Agency	Economic development	Other
Brazil	27,375	5,350	21,700	-	-	325	-
British Honduras	273	273	-	-	-	-	-
Costa Rica	212	212	-	-	-	-	-
Ecuador	257	-	-	-	-	257	-
Guatemala	3,238	3,238	-	-	-	-	-
Haiti	3,476	3,476	-	-	-	-	-
Honduras	211	211	-	-	-	-	-
Mexico	216	216	-	-	-	-	-
Peru	16,482	13,931	2,551	-	-	-	-
St. Lucia	8	-	-	-	-	8	-
Uruguay	20	20	-	-	-	-	-
Christmas holiday	16,688	-	-	-	-	-	16,688
Other	9,554	-	-	-	9,554	-	-
Total	965,342	536,844	121,147	91,818	22,713	139,323	26,497
Ocean freight: Title III foreign food donations	175,994	-	-	-	175,994	-	-
Grand Total	1,141,336	563,844	121,147	91,818	198,707	139,323	26,497
Percent of Total	100	50	11	8	17	12	2

Source: United States, Congress, Sixteenth Semiannual Report of Activities Carried on Under Public Law 480 (Washington: U. S. Government Printing Office), Table 17, p. 78.



Title III authorizes two programs: to donate surplus food to needy people both in the United States and abroad, and to barter surplus commodities for strategic materials. Total donations for both foreign and domestic relief under Title III amounted to \$2.6 billion at CCC cost as of June 30, 1962. The part for foreign donations amounted to \$1.8 billion, or 69 per cent of the total. They reached 110 countries and territories through United States private and church-affiliated welfare agencies and inter-governmental organizations. Agricultural commodities exported under barter contracts during the same period totaled \$1.6 billion at export market prices. The amount received by each country or territory is shown in Table 3.

Title IV provides for long-term dollar credit sales of United States surplus agricultural commodities. The first transaction under Title IV was entered into in fiscal year 1962. During fiscal 1962 nine agreements were signed with six countries. The estimated export market value of commodities sold under these agreements totaled \$57 million, including ocean freight costs. There are many indications that the United States government intends to replace the foreign currency sales under Title I of Public Law 480 with the dollar sales under Title IV at some future date.<sup>13</sup>

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<sup>13</sup> United States, Congress, Sixteenth Semiannual Report of Activities Carried on Under Public Law 480, House Document No. 526, 87th Congress, 2nd Session (Washington: U.S. Government Printing Office, 1962), p. 54.





TABLE 3

VALUE OF AGRICULTURAL COMMODITIES EXPORTED UNDER  
BARTER CONTRACTS, BY DESTINATION, JULY 1,  
1954 THROUGH JUNE 30, 1962

(in thousands of dollars)			
Country	Value	Country	Value
Aden	70	Guatemala	1,946
Algeria	981	Haiti	5,567
Angola	20	Honduras	201
Australia	7,893	Hong Kong	13,576
Austria	50,868	India	37,373
Azores	261	Indonesia	1,604
Bahamas	37	Iran	759
Bahrein	22	Iraq	2,835
Belgium/Luxembourg	119,047	Ireland	37,571
Bermuda	70	Israel	34,391
Bolivia	6,850	Italy	30,931
Brazil	32,025	Japan	174,578
British Guiana	20	Jordan	1,697
British Honduras	45	Korea	3,679
Cambodia	38	Kuwait	141
Cameroons	37	Laos	37
Canada	2,925	Lebanon	4,321
Canal Zone	144	Liberia	289
Canary Islands	13,185	Libya	8
Cape Verde Islands	32	Madeira	160
Ceylon	1,315	Malaya, Federation	884
Chile	3,248	Malta	624
China (Taiwan)	8,000	Mauritius	13
Colombia	12,054	Mexico	19,658
Congo, Republic	2,981	Morocco	3,014
Costa Rica	976	Mozambique	4,627
Cuba	5,526	Netherlands	141,960
Cyprus	1,806	Netherlands Antilles	37
Denmark	9,925	New Zealand	271
Dominican Republic	523	Nicaragua	603
Ecuador	33	Nigeria	2,963
El Salvador	775	Norway	28,475
Ethiopia	166	Okinawa	824
Finland	5,413	Pakistan	52
France	63,495	Panama	175
French Somaliland	177	Peru	23,662
French West Africa	1,868	Philippines	9,765
Germany, West	140,220	Poland	2,339
Ghana	4,667	Portugal	6,316
Greece	11,621	Portuguese India	52
Greenland	35	Qatar	10
Guam	53	Rhodesia & Nyasaland	466



TABLE 3--Continued

Country	Value	Country	Value
San Salvador	12	Togo	59
Sao Tome	36	Trieste	1,371
Saudi Arabia	801	Tunisia	938
Sierra Leone	80	Turkey	17,584
South Africa, Republic	5,063	U.A.R.	10,045
Spain	25,832	United Kingdom	279,279
St. Pierre-Miquelon	83	Uruguay	1,212
Surinam	10	Venezuela	1,414
Sweden	14,478	Virgin Islands	77
Switzerland	3,318	West Indies	1,642
Syrian Arab Republic	6,867	Yugoslavia	18,136
Thailand	4,536	Others	34,785
		Total	1,535,550

Source: United States, Congress, Sixteenth Semiannual Report of Activities Carried on Under Public Law 480 (Washington: U. S. Government Printing Office), Appendix, Table 26, p. 92.

Disposals under Public Law 480 have been an important factor in United States agricultural exports; exports under the law accounted for 27 per cent of total agricultural exports for the first eight years that the law has been in operation (through June 30, 1962). The relation of Public Law 480 programs to total exports is shown in Table 4.

#### United States Disposition of Foreign Currencies

Title I of Public Law 480 provides for the sale of surplus agricultural commodities for foreign currencies. These goods are not gifts as far as individual consumers are concerned because the recipient countries then sell these commodities in the open market. Whether these surpluses disposed of in this manner are



TABLE 4

EXPORTS OF U. S. FARM PRODUCTS UNDER PUBLIC  
LAW 480 COMPARED WITH TOTAL EXPORTS OF  
U. S. FARM PRODUCTS, 1954-62  
(in millions of dollars)

	1954-55 through 1958-59	1959-60	1960-61	1961-62	1954-55 through 1961-62
Public Law 480:					
Title I	2,805	825	934	1,015	5,579
Title II	410	65	146	176	797
Title III:					
Barter	1,056	149	147	184	1,536
Donations	788	104	144	177	1,213
Title IV				20	20
Total	5,059	1,143	1,371	1,572	9,145
Mutual security exports	1,636	167	186	74	2,063
Other exports	12,395	3,207	3,389	3,493	22,484
Total exports	19,090	4,517	4,946	5,139	33,692
Total Public Law 480 exports as percent of total exports	26	25	28	31	27

Source: United States, Congress, Sixteenth Semiannual Report of Activities Carried on Under Public Law 480 (Washington: U.S. Government Printing Office), Table 2, p. 3.

eventually a gift, a partial gift, or in effect a long-term loan to the receiving governments themselves depends upon the disposition the United States makes of the local currencies received.

There is much misunderstanding regarding the details of the sale of agricultural surpluses for foreign currencies.<sup>14</sup> Much of this is due to a general lack of understanding of foreign exchange

<sup>14</sup>See E.S. Mason, "Foreign Currencies We Can't Use," The Atlantic Monthly, Vol. CCV (May, 1960), pp. 79-86.





and exchange rates, and of the special problems of weak currencies. In discussing disposition of currencies obtained by the United States by sales under Title I, it should be pointed out that these currencies are not freely convertible because all the countries receiving surplus farm products under special programs have foreign exchange problems, and for a variety of reasons they have set the official rate of exchange higher than the equilibrium free exchange rate. As a result, the demand for foreign exchange (especially for dollars and pounds sterling) exceeds the supply in these countries.

The Treasury Department of the United States has been assigned the responsibility of supervising the deposits of all foreign currencies received under Title I of Public Law 480. It also issues regulations governing the custody and transfer of foreign currencies to various United States agencies. United States agencies desiring to use currencies acquired under Title I for special foreign problems submit proposals to the Bureau of the Budget for proposed programs, or projects. The Bureau of the Budget reviews the requesting agency's request, and if it is approved, the Budget Bureau's recommendations are presented to the Congress for consideration. Upon completion of the congressional action, the currency requested is made available to the agency for obligation.

It needs to be pointed out that both the donor and the receiving country are limited as to the use of foreign currency. In general, local currencies are either given back to the country in the form of grants, or loaned to the country and spent for uses



clearly specified by the original Title I agreement between the United States and the country concerned. However, in a few countries a considerable amount of local currencies have accumulated.

As authorized by Public Law 480, local currencies generated under Title I may be used for financing 20 specific types of activities, provided this is mutually agreeable to both the United States and the countries of origin of the local currencies. The great bulk of these local currencies have been expended for the first seven of the 20 uses authorized and shown below in Table 5.

Up to five per cent of Title I funds generated may be expended for agricultural market development (the first use specified in Table 5) by United States agencies, provided the funds are appropriated by Congress, and provided the country in which the funds were generated and in which the funds are to be expended has agreed to such development work. As a general rule, most of the Title I funds expended on market development work are from funds generated in the country itself; however, most Title I agreements specify that the United States may convert up to a maximum of from one to two per cent of local currencies to any other foreign currency for use in market development work. The purpose of this is to make possible market development work in countries which are not eligible for Title I sales, and which have therefore not generated any Title I funds.<sup>15</sup> So far four general types of foreign market

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<sup>15</sup>West Germany, for example, is no longer eligible for Title I sales, and therefore United States agencies convert from Title I currencies to German marks for use in West Germany.



TABLE 5

AUTHORIZED USES OF FOREIGN CURRENCIES GENERATED  
UNDER TITLE I, PUBLIC LAW 480

Currency Use	Responsible Administering Agency
(1) Agricultural market development	Dept. of Agriculture
(2) Common defense	Dept. of State and Defense
(3) Purchases of goods for friendly countries	Dept. of State
(4) Loans to private enterprises	Export-Import Bank
(5) Payment of U.S. obligations	Any authorized U.S. Government Agency
(6) Loans to foreign governments	Dept. of State and Development Loan Fund
(7) Grants for economic development	Dept. of State
(8) International educational exchange	Dept. of State
(9) Translation of books and periodicals	U.S. Information Service
(10) American-sponsored schools and centers	Dept. of State and U.S. Information Service
(11) Scientific, medical, cultural and educational activities	National Science Foundation, Dept. of State and other agencies
(12) Buildings for U.S. Gov't. use	Dept. of State
(13) Trade fairs	U.S. Information Service
(14) Acquisition, indexing, and dissemination of foreign publications	Librarian of Congress
(15) American educational institutions	Dept. of State
(16) Workshops and chairs in American studies	Dept. of State
(17) Purchase non-food items for emergency uses	Dept. of State
(18) Audio-visual materials	Dept. of State and U.S. Information Service
(19) Sales of dollars for U.S. tourists	Not assigned
(20) Supplemental stockpile	Office of Civil and Defense Mobilization

Source: United States, Congress, Sixteenth Semiannual Report of Activities Carried on Under Public Law 480 (Washington: U.S. Government Printing Office), p. 10.







development programs have been undertaken: (1) cooperative programs with trade and agricultural groups; (2) trade fair activities; (3) marketing research; (4) research concerning the utilization of agricultural commodities. Generally speaking, these programs are joint efforts between the United States Department of Agriculture and various trade groups in the United States and in the countries where the activities are being conducted. From the beginning of this program (1954) to June 20, 1962, a total of 658 projects were undertaken and a total of \$78 million (at the official rate of exchange) was spent and/or obligated for this purpose.

Public Law 480 (Section 104) also provides for the use of Title I currencies to be used for the common defense (item 2 in Table 5) of the country in which the funds are generated, and the United States. As of December 31, 1961, the equivalent of \$367 million (at the official rate of exchange) were obligated for this purpose. The major items in this category include procurement of military equipment and services for the common defense.

About \$50 million has been allocated for the third-listed authorized use (purchase of goods for friendly countries). This is a relatively minor use, and all of the funds allocated for this program will be expanded in the foreseeable future.

Probably the most controversial authorized use for Title I funds is provided for by Section 104(e), and is known as the "Cooley Amendment." It specifies that up to 25 per cent of foreign currencies generated under each Title I agreement be set aside for loans to private business firms through the Agency for International Development. These loans are limited to (1) United States firms,



or their affiliated branches, and must be expanded for business development and trade expansion in the country in which the Title I funds were generated, (2) either United States firms and firms of the country concerned for expanding markets for United States agricultural products abroad. Loans made are repayable in the same foreign currency. Interest rates are similar to those charged for comparable loans in the country concerned. The maturities vary with the purpose of financing. As of June 30, 1962, \$116 million of foreign currencies equivalent had been granted for use in 19 countries.

United States agencies requiring foreign currencies for the payment of United States obligations can exchange appropriated dollar funds for Title I funds with the United States Treasury (in accordance with the fifth-listed use) through the United States disbursing officers in the embassies. As of December 31, 1961, \$616 million of Title I funds has been exchanged by the United States Treasury, through United States embassies, primarily for meeting routine obligations of the United States government agencies in the countries concerned. The net effect of this arrangement is to save dollars for the United States. In addition, the United States Congress has authorized the obligation of up to \$250 million worth of Title I currencies for construction, rental, or procurement of United States military housing and related community facilities in foreign countries.

The largest single use of foreign currency sales proceeds is provided for by Section 104(g) which authorizes loans to the country in which the Title I funds were generated. Since the



beginning of the program in fiscal year 1955 through June 30, 1962, the equivalent of \$3.6 billion had been authorized by the Congress for obligation for loans to 36 countries. This represents about 43 per cent of the total amount of Title I currencies generated during the same period. These funds are largely used to promote economic development in the recipient countries. As of June 30, 1962, funds actually obligated amounted to \$3.0 billion (Table 6). Of these funds a total of \$1.4 billion had been disbursed on actual projects as of December 31, 1962 (Table 7). The bulk of these disbursements was for financing economic development of industry and mining, and secondly for agricultural development. As Table 7 shows, the largest recipients have been India, Japan, and Yugoslavia. Taiwan has received a total of less than \$1.0 million.

The loans made under this section (104g) may be repaid either in dollars or in the currency of the borrower. However, it is highly improbable that any has been repaid in dollars, or ever will be, because all currencies obtained under Title I are overvalued. Interest rates on these loans have varied from time to time, but since April 14, 1959, the rate applicable to loans to governments has been uniformly set at 4 per cent per year. Loan agreements executed after June 22, 1962, will generally require an interest rate of three-fourths of one per cent per year. Since the agreements do not contain a maintenance of value clause, the United States will receive repayment of the same amount of foreign currencies lent without regard to changes which occur in exchange rate relative to the dollar. In view of







TABLE 6

PUBLIC LAW 480 LOAN AGREEMENTS UNDER SECTION  
104(g) SIGNED AS OF JUNE 30, 1962  
(in millions of dollars)

Country	Cumulative total	Country	Cumulative total
Far East	<u>244.9</u>	Europe (cont'd)	
Burma	26.6	Portugal	3.4
China (Taiwan)	6.6	Spain	255.2
Indonesia	94.1	Yugoslavia	241.9
Japan	108.8		
Philippines	5.2	Africa	<u>17.1</u>
Thailand	3.6	Guinea	7.6
Near East and South		Sudan	1.6
Asia	<u>1,757.3</u>	Tunisia	7.9
Ceylon	9.6	Latin America	<u>331.0</u>
Greece	53.5	Argentina	20.0
India	1,095.6	Bolivia	5.6
Iran	23.2	Brazil	148.1
Israel	143.5	Chile	56.3
Nepal	1.0	Colombia	36.7
Pakistan	150.1	Ecuador	8.2
Syria	22.8	Mexico	10.3
Turkey	92.2	Paraguay	4.8
U.A.R.	165.8	Peru	19.3
Europe	<u>647.8</u>	Uruguay	21.7
Austria	26.3		
Finland	19.0	Grand Total	<u>2,998.1</u>
Iceland	9.5		
Italy	92.5		

Source: United States, Congress, Sixteenth Semiannual Report on Activities Carried on Under Public Law 480 (Washington: U.S. Government Printing Office), Table 15, p. 24.

inflationary pressures in all underdeveloped countries, it is very probable that the rates of exchange will deteriorate, and therefore when the loans are repaid the United States will receive in repayment a smaller quantity of dollar equivalent.



TABLE 7

LOANS FOR ECONOMIC DEVELOPMENT TO FOREIGN GOVERNMENTS  
 UNDER SECTION 104(g), DISBURSEMENTS BY FIELD OF  
 ACTIVITY  
 (in millions of dollars)

Country	Total	Food and Agricul- ture	Indus- try and mining	Trans- por- ta- tion	Labor	Health & Sanita- tion	Edu- cation	Com- munity devel- opment	General
Total, all regions	1,399.2	248.6	685.3	152.4	1.0	19.1	20.4	13.2	259.1
Far East	140.8	41.3	85.7	11.1	-	.2	-	-	2.5
Burma	6.4	5.9	.3	-	-	.2	-	-	-
China (Taiwan)	.8	-	-	-	-	-	-	-	.8
Indonesia	21.6	1.6	8.9	11.1	-	-	-	-	-
Japan	105.3	28.8	76.5	-	-	-	-	-	-
Philippines	5.0	5.0	-	-	-	-	-	-	-
Thailand	1.7	-	-	-	-	-	-	-	1.7
Near East and South Asia	622.6	43.0	299.4	50.0	1.0	17.5	.3	5.1	206.2
Ceylon	4.2	3.0	.5	.4	.1	-	-	-	.2
Greece	42.3	6.0	8.7	13.8	-	-	.3	1.9	11.6
India	240.4	-	199.2	1.8	-	-	-	-	39.4
Iran	8.8	-	-	8.8	-	-	-	-	-
Israel	92.9	34.0	48.9	6.0	.9	-	-	3.1	-
Pakistan	97.3	-	42.1	19.2	-	17.5	-	.1	18.3
Syria	2.1	-	-	-	-	-	-	-	2.1
Turkey	37.7	-	-	-	-	-	-	-	37.7
U.A.R.	96.9	-	-	-	-	-	-	-	96.9
Latin America	220.4	80.7	102.9	30.3	-	.6	.1	2.7	3.0
Argentina	8.6	8.6	-	-	-	-	-	-	-
Brazil	114.7	6.9	91.6	13.1	-	-	-	-	3.0
Chile	31.2	12.1	2.4	14.0	-	-	-	2.7	-



TABLE 7--Continued  
(in millions of dollars)

Country	Total	Food and Agricul- ture	Indus- try and mining	Trans- por- ta- tion	Labor	Health & Sanita- tion	Edu- ca- tion	Com- mun- ity devel- opment	General
Colombia	24.9	24.9	-	-	-	-	-	-	-
Ecuador	5.4	2.9	1.4	1.0	-	-	.1	-	-
Mexico	10.3	10.3	-	-	-	-	-	-	-
Paraguay	2.1	.5	-	1.0	-	.6	-	-	-
Peru	12.5	12.3	.2	-	-	-	-	-	-
Uruguay	10.7	2.2	7.3	1.2	-	-	-	-	-
Europe	415.5	83.6	197.3	61.0	-	.8	20.0	5.4	47.4
Austria	23.1	-	23.1	-	-	-	-	-	-
Finland	18.3	-	18.3	-	-	-	-	-	47.4
Iceland	5.9	-	5.9	-	-	-	-	-	-
Italy	69.8	16.0	-	-	-	-	6.4	-	-
Portugal	3.4	-	3.4	-	-	-	-	-	-
Spain	124.2	58.3	48.4	15.6	-	-	1.9	-	-
Yugoslavia	170.8	9.3	98.2	45.4	-	.8	11.7	5.4	-

Source: United States, Congress, Sixteenth Semiannual Report on Activities Carried on Under Public Law 480 (Washington: U.S. Government Printing Office), Table 16, p. 25.





Another major use for which Title I funds have been expended are for grants for economic development, and this use will probably expand greatly in the future. Since the inception of Public Law 480 through December 31, 1961, a total of \$196 million had actually been disbursed. The largest disbursements were for transportation (\$50 million), food and agriculture (\$40 million), health and community development (\$30 million). Disbursements for all others amounted to \$46 million. The bulk of these disbursements were to Pakistan and Yugoslavia. Total agreements already signed (through June 30, 1962) provide for a total disbursement of \$1,600 million.

About 96 per cent of these funds will be granted to Burma, India, Indonesia, Israel, Pakistan, the United Arab Republic, and Yugoslavia. The reason why the bulk of these funds will be granted to these countries is because the United States holdings of the currencies from these countries are deemed to be in "excess." That is, they are in excess of the foreseeable needs of the United States government in defraying its routine expenses in the country concerned.

The amount of Title I currencies allocated for the authorized uses 8 through 20 in Table 5 are insignificant, and will not be further discussed.

In summary, from the beginning of the program in July, 1954, through December 31, 1961, about \$7.7 billion of surplus agricultural commodities were sold for foreign currencies under the authority of Title I of Public Law 480. Of this amount, \$5.3 billion had been obligated by the Bureau of the Budget for various authorized uses by the end of 1961. However, actual disbursements,



as shown in Table 8, only amounted to \$2.6 billion, or about 50 per cent of the total amount obligated.

TABLE 8  
STATUS OF FOREIGN CURRENCIES UNDER TITLE I, PUBLIC  
LAW 480, AS OF DECEMBER 31, 1961  
( in millions of dollars )

Country	Agreement Amounts Through December 31, 1961	Funds Allocated	Disburse- ments By Agencies Through December 31, 1961
Argentina	64.1	33.5	17.5
Austria	42.9	40.1	36.6
Bolivia	3.7	.2	-
Brazil	284.4	251.4	137.4
Burma	40.7	37.8	11.7
Ceylon	26.1	21.0	9.6
Chile	71.9	59.8	38.4
China (Taiwan)	95.8	62.1	35.0
Colombia	70.9	59.0	36.6
Congo	7.5	-	-
Ecuador	13.2	10.2	7.4
Finland	46.5	42.0	29.3
France	35.8	34.4	23.5
Germany	1.2	1.2	1.8
Greece	97.2	85.3	76.3
Iceland	12.2	10.3	8.7
India	2,337.3	1,716.3	319.9
Indonesia	186.8	162.6	53.7
Iran	34.3	26.5	19.5
Israel	194.4	185.9	118.6
Italy	152.9	144.2	115.3
Japan	150.8	143.1	139.0
Korea	217.0	214.1	180.2
Mexico	28.2	25.2	21.0
Netherlands	.3	.3	.9
Pakistan	1,065.9	373.6	264.3
Paraguay	9.9	2.9	2.5
Peru	37.3	28.5	21.6
Philippines	36.2	14.1	12.4
Poland	409.9	51.6	1.9
Portugal	7.1	7.1	6.8
Spain	505.6	449.7	260.5
Sudan	4.6	-	-
Syria	37.0	21.9	4.1
Thailand	4.6	4.3	4.4



TABLE 8--Continued  
(in millions of dollars)

Country	Agreement Amounts Through December 31, 1961	Funds Allocated	Disburse- ments By Agencies Through December 31, 1961
Tunisia	15.3	4.1	.2
Turkey	328.9	263.9	163.3
United Arab Republic	311.9	213.3	111.4
United Kingdom	48.2	43.9	29.8
Uruguay	46.4	34.3	15.0
Vietnam	49.2	20.4	7.4
Yugoslavia	517.5	400.2	266.2
Total	7,651.6	5,309.0	2,609.7

Source: United States, Congress, Sixteenth Semiannual Report of Activities Carried on Under Public Law 480 (Washington: U.S. Government Printing Office), Table 6, p. 11.

### Summary

The objective most emphasized by the proponents of Public Law 480 in 1954 was the disposal of United States farm surpluses, which at that time were accumulating at the rate of \$3.0 billion per year. Also stressed as objectives of the Act were assistance to economic development in receiving countries, and the development of permanent export markets for United States farm products. It is difficult to determine if all of the objectives of Public Law 480 have been realized. The surplus disposal of Public Law 480, when measured in terms of quantities of surplus agricultural commodities exported, can be said to have been successful. The fact that at present nearly 30 per cent of all United States agricultural exports are moved under Public Law 480 substantiates this.





However, when weighed in terms of long-term implications for United States agriculture, its effects are hard to assess. Public Law 480 has probably reduced the storage problem of Commodity Credit Corporation, at least temporarily. Also, it has reduced the pressure of surplus stocks on commodity markets. On the other hand, by disposing of these surpluses, needed adjustments in United States agriculture have probably been temporarily delayed.

In the early days of Public Law 480 farm surpluses were considered as temporary, at least as far as government officials were concerned. But in 1957 both administrators and legislators realized that "that marriage of convenience between supposedly short-run overproduction and short-run disposal was based on erroneous expectations."<sup>16</sup> Meanwhile, vigorous protests from competing countries and strong pressures from some United States commercial exporters, who saw government sponsored programs disrupting their markets, combined to bring a reconsideration. Since 1957 the focus has been on using surplus agricultural commodities to promote economic development which would in turn increase consumption of food in addition to current levels of consumption. On the other hand, in order to reduce conflicts with other exporting countries, a policy of consultation with other exporting countries has been adopted in order to coordinate export policies of the United States and other exporting countries. It is still much too early to determine if the objective of assisting economic develop-

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<sup>16</sup>Elmer L. Menzie and others, Policy for United States Agricultural Export Surplus Disposal, Technical Bulletin 150 (Tucson: The University of Arizona, College of Agriculture Experiment Station, 1962), p. 53.



ment has been achieved because this is a long-run objective.



## CHAPTER IV

### GROWTH THEORY AND AGRICULTURAL SURPLUSES

In recent years problems of economic development have attracted wide attention, and several theories of growth have been advanced. In the main, these theories have largely been concerned with the transition process an underdeveloped country must pass through from its traditional stagnant state to one of self-sustaining growth. Most of the individual theories focus upon some outstanding attribute of underdeveloped countries which is regarded as a unique barrier responsible for the lack of economic growth. The emphasis is largely on economic matters; it is only very recently that sociological, anthropological, and psychological aspects of the problem have received any attention.

#### Review of Current Growth Theories

##### Lewis' Two-Sector Model

One of the better known theories of economic development in underdeveloped countries was formulated by Professor W. Arthur Lewis.<sup>1</sup> Lewis assumes that underdeveloped economies are composed of a subsistence sector and a capitalistic sector. The subsistence sector is primarily agricultural with an "unlimited labor supply,"

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<sup>1</sup>W. Arthur Lewis, "Economic Development with Unlimited Supplies of Labor," The Manchester School of Economics and Social Science, Vol. XXII (May, 1954), pp. 139-191.





while the capitalistic sector is primarily industrial, but may include commercial agriculture.

The essence of this theoretical two-sector model is that growth will occur if labor is given more capital to work with. During the early stages of growth there is little capital, and capital is primarily used in the capitalistic sector to equip labor drawn from the subsistence sector. At this stage it is important that capital "widening" be stressed. Only later, when capital becomes abundant, can development be capital "deepening." Since the supply of labor is assumed to be unlimited in the subsistence sector during the first stage, the transfer of manpower to the capitalistic sector depends entirely on the demand for labor in the capitalistic sector, which, in turn, is determined by the rate of capital accumulation. Unless large amounts of capital can be borrowed from abroad, investment capital must be realized by domestic savings, which are dependent on increased productivity or reduced consumption, or both. Thus in Lewis' theoretical formulation, economic development is primarily a process of capital accumulation that is used initially to equip surplus labor drawn out of agriculture where its net productivity is zero. Eventually, as more and more labor is withdrawn from agriculture, labor surpluses are no longer "unlimited" and wages will henceforth be determined by the marginal productivity of labor in the capitalistic sector. "When capital catches up with the labor supply," as Lewis phrases it, or when labor in both sectors are paid the same wage according to their marginal productivity, the two-sector model is no longer



relevant, and the economy supposedly reaches a stage where sustained growth is maintained.

### Low Income Theory

As mentioned briefly in Chapter II, the vicious circle of low income is one of the barriers to economic development in underdeveloped countries. Because income is low there is little to save, consequently, investment is impossible. Since there is no new investment, income remains low and methods of production remain primitive. According to Nurkse,

On the supply side there is small capacity to save, resulting from the low level of real income. The low real income is a reflection of low productivity, which in its turn is due largely to the lack of capital. The lack of capital is a result of the small capacity to save, and so the circle is complete.<sup>2</sup>

This argument is very convincing to people in developed countries, because according to their standards of living, the levels of income in underdeveloped countries are hardly sufficient to live, let alone to save.

Several weaknesses of the low income theory have been pointed out by Everett E. Hagen.<sup>3</sup> Hagen points out that the low level of saving in underdeveloped countries is not due solely to the rela-

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<sup>2</sup>Ragnar Nurkse, Problems of Capital Formation in Underdeveloped Countries (Oxford: Basil Blackwell, 1953), p. 5.

<sup>3</sup>Everett E. Hagen, On the Theory of Social Change (Homewood, Illinois: The Dorsey Press, 1962), pp. 38-40.



tively low levels of income (by Western standards), but due to the lack of motivation to save. Hagen contends that the unequal distribution of income in underdeveloped countries makes it quite possible for the upper income groups to save, if they were so motivated.

It is common knowledge to economists acquainted with underdeveloped countries that distribution of income in these countries is as unequal, if not more so, than in developed ones. According to Lewis' estimates, in a number of underdeveloped countries the top ten per cent of people receives 40 per cent of the output of the economy.<sup>4</sup> Thus Hagen argues that there seems no reason why the higher income groups should not be able to save part of their income if the mass of the population manages to live on an income only a fraction as large as that of the upper income groups. In fact, the top ten per cent income group in underdeveloped countries often invests its savings in foreign assets, or living a luxurious life, sometimes abroad. According to Hagen, "Reduction by one-fourth in the level of consumption of those high-income families would provide resources ample for sufficient investment for economic growth."<sup>5</sup>

There is another argument to explain the low level of savings, which is usually known as the demonstration effect.<sup>6</sup> This argu-

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<sup>4</sup>W. Arthur Lewis, Theory of Economic Growth (London: George Allen & Unwin, 1955), p. 26.

<sup>5</sup>Hagen, On the Theory of Social Change, p. 39.

<sup>6</sup>James S. Duesenberry, Income, Saving, and the Theory of Consumer Behavior (Cambridge: Harvard University Press, 1949), p. 27; Nurkse, Problems of Capital Formation in Underdeveloped Countries, pp. 57-81.







ment says that because of increased international communication people in underdeveloped countries are driven to emulate western consumption standards and, therefore, have little left for saving. Nevertheless, there is no empirical study to support the hypothesis. As a matter of fact, before modern developments in communication with the West, there was little evidence that saving in these countries was higher than at present. In summary, Hagen concludes:

The mass of the people in a number of low-income societies must be not far above this level (physiological subsistence level of living). Yet at present income levels, individuals in all but the lowest income classes in these societies spend part of their income on products not at all related to the physical necessities of life. Higher income classes dispose of a considerable fraction of their income in these ways. If sufficiently motivated, the people of the society could and would choose to save enough to finance the investment necessary for raising per capita income.<sup>7</sup>

### The Lump of Capital Argument<sup>8</sup>

According to this theory, it is argued that social overhead facilities are of prime importance in economic development. Economic development can start forward only after certain social overhead facilities, or infrastructure, have been provided. Such overhead facilities generally include roads, railroads, and power installations. These are usually regarded as being able to serve

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<sup>7</sup>Hagen, On the Theory of Social Change, p. 40.

<sup>8</sup>H.W. Singer, "Economic Development in Underdeveloped Countries," Social Research, Vol. XVI (1949), p. 6; Paul N. Rosenstein-Rodan, "Notes on the Theory of the 'Big Push'," in H.S. Ellis and H.W. Wallich (eds.), Economic Development in Latin America: Proceedings and Conference Held by the International Economic Association (London: Macmillan, 1961), pp. 57-81.



not one but many industries, and to provide a springboard for industrial advance. It is further asserted that these facilities cannot become fully effective unless they are installed in large and expensive units. Based on this argument, exponents of this theory maintain that economic development in underdeveloped countries is blocked by the lack of the necessary facilities, which is the direct result of the inability to provide large sums of investment capital for development of the infrastructure.

There is no gainsaying that overhead facilities are helpful in promoting economic growth. The stimulus that they provide for other industries is not in dispute. But the argument that social overhead facilities are the preconditions for development is not soundly based. Firstly, there are other possible ways which are able to stimulate growth when large-scale overhead projects are not feasible. Secondly, many overhead projects can in fact be built through piecemeal methods, rather than by large investment lumps. Empirical study does not support this argument either.<sup>9</sup> Historical experiences reveal that social overhead facilities in countries which have experienced considerable growth grew along with the economy as a whole. For example, increased construction of canals and roads are usually preceded by an increase in the demand for transportation resulting from general economic growth. All such improvements in transportation, for example, serves as further aids to growth.

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<sup>9</sup>Hagen, On the Theory of Social Change, p. 46.



### The Big Push Theory

The "big push" theory was first developed by Professor Paul N. Rosenstein-Rodan.<sup>10</sup> His theory is based on his "three indivisibilities." These are (1) indivisibilities in the production function, especially the indivisibility of the required supply of social overhead capital, (2) indivisibility of demand (resulting from the complementary nature of demand), and (3), indivisibility in the supply of savings. Because of these indivisibilities Rosenstein-Rodan argues that a "bit by bit" development process will not add up to in its effects to the sum total of the single bits. In other words, isolated and small efforts may not add up to a sufficient impact on growth. Therefore, a comprehensive and minimum quantity of investment is a necessary condition for development.

Rosenstein-Rodan's "big push" theory has been further elaborated by Harvey Leibenstein and presented under the name of "critical minimum effort."<sup>11</sup> The major argument of Leibenstein's thesis is that in order to achieve sustained growth it is necessary that "the initial stimulant or stimulants to development be of a certain critical minimum size." In Leibenstein's theory underdeveloped economies are characterized "by a set of related

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<sup>10</sup>Paul N. Rosenstein-Rodan, "Industrialization of Eastern and Southeastern Europe," The Economic Journal, Vol. LIII (1943), and Rosenstein-Rodan, loc. cit.

<sup>11</sup>Harvey Leibenstein, Economic Backwardness and Economic Growth (New York: John Wiley & Sons Inc., 1957), pp. 94-110.







factors that have a certain degree of stability."<sup>12</sup> A small stimulant or shock may break the stability, but after a short period of time they tend to return to the stability of backwardness. That is to say, the efforts to escape from economic backwardness are below the critical minimum magnitude required for self-sustaining growth. Or, in Higgins' words, "The configuration of income-raising and income-decreasing factors in underdeveloped countries may be such that only a discontinuous jump to considerable higher levels of capital accumulation will bring the economy into a zone of steady growth."<sup>13</sup> For a situation such as exists in most parts of Asia, Leibenstein suggests that investment of 12 to 15 per cent of national income would be necessary to bring the economies to a stage of sustained growth. This is beyond the capacity of underdeveloped countries, and outside assistance is required.

The "big push" theory shows how economic growth can rapidly get started. But it does not explain why economic development has taken place in some places while not in others. Nor is it a distinguishing feature in the history of economic development. At least as of now, there are no major developed countries which started with a "big push."

### Summary

All of the theories on economic development which we have

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<sup>12</sup>Ibid., p. 94.

<sup>13</sup>Benjamin Higgins, Economic Development (New York: Norton & Company, 1959), p. 413.



discussed stress the importance of capital formation. Their great defect is that they ignore the great potential contributions of technological innovations. It is understandable why many economists believe that underdeveloped countries need capital to cooperate with their abundant labor in their economic development. But the shortage of capital thesis exaggerates the difficulties of raising national income in less-developed countries. The point is that it ignores the possibility of raising the output from existing capital. In studying the economic situation of India, Reddaway found that there were both under-utilization and inefficient utilization of capital in the Indian economy.<sup>14</sup> The former case, which resulted from inadequate demand, existed in such things as textile mills and roads, while the latter was due to bad management and could be cured by the introduction of better methods. The most important instance is in agriculture, where an increase in output is greatly dependent on abolishing primitive methods and adopting new ways.

On the other hand, increased savings for investment alone cannot assure that production will continue to increase because expansion in output depends not only on the necessary capital, but also on other cooperating factors such as skilled labor, management, raw materials, power and transportation. In analyzing economic development of underdeveloped countries we cannot assume that all these things are in adequate supply. Furthermore,

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<sup>14</sup>W.B. Reddaway, The Development of the Indian Economy (Homewood, Illinois: Richard D. Irvin, 1962), pp. 34-46.



an expansion of output is also dependent on the existence of an adequate market; the size of market directly influences incentives to invest.

In the economic development of the western world technological innovation has played a very important role. The importance of technological advances was pointed out by Schumpeter.

The slow and continuous increase in time of the national supply of productive means and savings is obviously an important factor in explaining the course of economic history through the centuries, but it is completely overshadowed by the fact that development consists primarily in employing existing resources in a different way, in doing new things with them, irrespective of whether those resources increase or not.<sup>15</sup>

Robert Solow's article, "Technical Change and the Aggregate Production Function" supports Schumpeter's theory. According to Solow's estimates, increased capital contributed only about 10 to 15 per cent of the increase in output per man-hour in the United States from 1909 to 1949. The remaining 87-90 per cent increase in productivity is largely attributed to technological progress.<sup>16</sup> With regard to the situation of underdeveloped countries, we cannot assume that output would necessarily increase equally due to innovations, but neither can we assume that the possibilities for increasing output due to innovations may not even be greater.

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<sup>15</sup>J.A. Schumpeter, The Theory of Economic Development (Cambridge: Harvard University Press, 1949), p. 68.

<sup>16</sup>Robert M. Solow, "Technical Change and the Aggregate Production Function," Review of Economics and Statistics, Vol. XXXIX (August, 1957), pp. 312-20.





At any rate, the role of innovations in increasing output should not be overlooked.

In conclusion, although theories of economic development do not completely explain the processes whereby growth begins and is sustained, they point out some important barriers to economic development. It should, however, be emphasized that economic analysis by itself cannot explain the whole problem of economic backwardness. Any complete explanation must take all aspects, including non-economic aspects of uneconomic cultures, into account. This view has been ably stated by Professor Kaldor.

In my view the greatly accelerated economic development of the last 200 years--the rise of modern capitalism--can only be explained in terms of changing human attitudes to risk-taking and profit-making. . . . The emergence of the 'business enterprise' characteristic of modern capitalism was thus the cause rather than the result of changes in the modes of production; and it was the product of social forces that cannot in turn be accounted for by economic and technical factors.<sup>17</sup>

### Labor-Capital Substitutability

It should be emphasized that the outstanding feature of underdeveloped economies is a low ratio of capital to labor. That is, among the factors of production, capital is relatively scarce and labor is relatively abundant. Rates of interest in underdeveloped countries are generally much higher than in developed countries, and for a variety of reasons. Elements of risk

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<sup>17</sup>Nicholas Kaldor, Essays on Economic Stability and Growth (London: G. Duckworth and Co., 1960), p. 236.



are generally very high; the lender never knows if his loan will be repaid. This is especially serious with regard to foreign loans because foreign equity or property in underdeveloped countries is frequently confiscated. Inflation, and fear of inflation is another major cause for high interest rates. One of the more obvious causes, but not necessarily the most important, is an acute shortage of capital funds. In such circumstances the marginal productivity of those types of capital (such as textile or chemical fertilizer industries) which can be combined with relatively large amounts of labor may be very high, and this will exert an upward pressure on interest rates. Labor, on the other hand, is abundant and average wage rates are relatively low because its marginal productivity is low. This situation is in outright contrast with developed economies where wage rates are relatively high, and capital is widely substituted for labor due to the high wage rates.

Because of the relatively high cost of capital (high interest rates), it is unrealistic to stress the need for labor-saving capital goods in underdeveloped countries. Since labor is abundant and capital is scarce, the easiest way to promote development lies in the utilization of the abundant factor, with capital-saving rather than labor-saving capital goods. Enke says, "It is a sound principle, especially where governments claim they have redundant labor and must receive loans, that scarce capital be combined with many workers rather than with a few."<sup>18</sup> This is

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<sup>18</sup>Stephen Enke, Economics for Development (Englewood Cliffs, New Jersey: Prentice-Hall, 1963), p. 118.



possible because capital and labor are substitutable for each other within certain ranges of combinations.<sup>19</sup> This substitute relationship can be shown by the concept of isoquants, assuming that labor and capital are the only two variable factors of production, other factors being held constant. An isoquant shows the different combinations of two variable resources which a firm can employ to produce equal amounts of product. This concept can also be stated for a nation as a whole. In Figure 1 the curve designated Y is an isoquant representing Y units of output. Points along the isoquant show the various combinations of capital and labor which will together produce Y units of output. For example, the nation concerned can obtain Y units of product by using  $Ob_1$  of capital together with  $Oa_2$  of labor, or by using  $Ob_2$  of capital together with  $Oa_1$  of labor. From this it is concluded that the

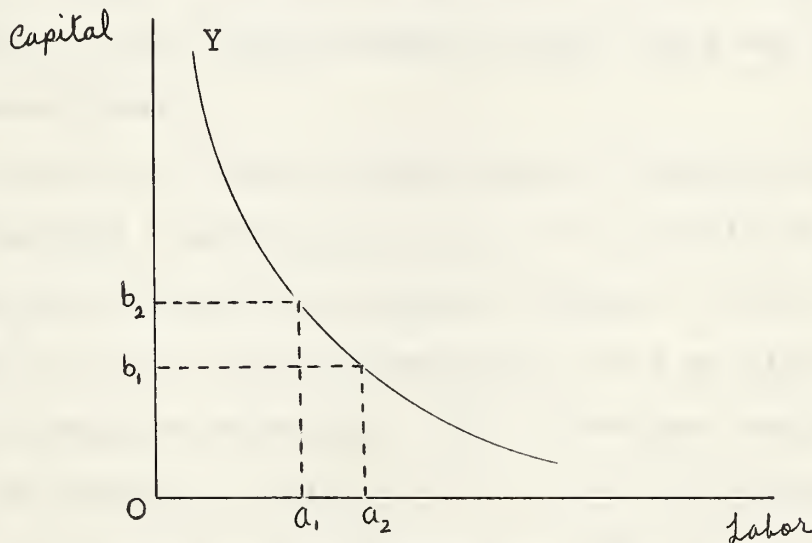


Figure 1

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<sup>19</sup>Ibid.





practical point in economic development of underdeveloped countries is to put more labor, especially the underemployed of which there are many, to work both on capital formation and in the production of consumer goods. There is no a priori reason for concluding that projects suitable for this purpose may not be in agriculture as well as in industry.

### Use of Agricultural Surpluses

We have earlier mentioned that a possible way to finance employment in underdeveloped countries would be through loans or grants from developed countries. Many loans and grants have already been made by the United States in the form of agricultural commodities which are transferred to underdeveloped countries under authorization of Public Law 480. We shall now turn to a consideration of the effectiveness of such loans and grants in economic development.

As a result of large accumulations of agricultural surpluses in some developed countries since the end of World War II, many discussions have centered on surplus disposal. Focus has been on the ways in which existing surpluses could be disposed of, and future surpluses prevented. One of the ways suggested for disposing of surpluses would be to use them for aiding economic development in less-developed countries. The idea of using surpluses for this purpose was first proposed in a pilot study made by the Food and Agriculture Organization of the United Nations. The study states:



The idea in using surpluses to aid economic development is very simple. In most underdeveloped countries there are many unemployed or underemployed farmers and other workers. There are a number of projects which could be undertaken by putting these people to work with local materials and local resources, or with only small amounts of foreign equipment. This would speed their country's development and increase its productive ability by building roads, wells, dams, irrigation canals, schools, warehouses, processing plants, etc. But when unemployed people are put to work they have to be paid, and their increased purchases of food, clothing, etc. raise the levels of demand. This increase in demand for consumer goods, coming into the market before the newly-created facilities can begin to expand production, would tend to cause inflation. That is where the surplus farm products from other countries could come in. They could help to satisfy a large part of the increased demand from the extra people put to work until later expanding production satisfied it. This would thus make possible increased employment and consumption for the present, and higher productive power, demand for goods, and sustained employment for the future.<sup>20</sup>

In order to evaluate the validity of the idea, it is necessary to set up some appropriate criteria against which benefits and defects can be measured. If the advantages outweigh the disadvantages, such a proposal would be practicable, otherwise, it would not be. Criteria to be set up for the purpose include both economic and non-economic aspects. However, in our evaluation emphasis is placed on economic aspects, and only the effects on the receiving countries are considered. The effect of Public Law 480 surpluses on the following will be considered: (1) resource allocation, (2) marginal utility, (3) level of prices, (4) rate

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<sup>20</sup>United Nations, Food and Agriculture Organization, Uses of Agricultural Surpluses in Under-developed Countries: A Pilot Study in India, Commodity Policy Studies No. 6 (Rome: 1955), p. 3.



of economic growth, (5) non-economic considerations.

### Resources Allocation

The first criterion to be considered is the effects of surplus disposal on resource allocation. The chief concern here is whether surplus disposal programs improve or hamper the pattern of resource use within the receiving countries. This is dependent on whether surplus disposal helps to bring about a state of resource use such that the marginal cost of each resource is equal to its marginal revenue in every industry which uses the resource.

For the recipient countries surplus agricultural commodities received represent external resources obtained without making payment in foreign exchange. They add to the total resources available. The additional resources will give the economy concerned more flexibility in adjusting its resource use. If they are wisely used they may enable the economy to alter its pattern of resource use to achieve greater efficiency in resource use. The most direct and immediate result of imported agricultural surpluses will depress the prices of domestically produced food commodities below the level than they would otherwise have been. Other things being equal, this will lessen the government's concern with agricultural improvement, and detract from farmers' incentive to increase production. By and large, it may inhibit the growth of the agricultural sector. This is the kind of undesirable side effects with which Professor T.W. Schultz and some







other economists are concerned.<sup>21</sup> However, if recipient countries realized that food supplies under Public Law 480 are probably a temporary phenomenon, they will be able to take action to prevent the occurrence of such undesirable side effects. Changes in resource allocation may also occur between various enterprises within agriculture. For example, the planted acreage of wheat is likely to be reduced, and the acreage shifted to other crops as a result of wheat being imported under Public Law 480. It seems clear that whether Public Law 480 commodities improve or impair resource use in recipient countries depends on the receiving countries themselves because they can take measures to prevent or mitigate any undesirable effects.

### Marginal Utility

Because of the lower levels of nutrition in recipient countries than in donor countries, it follows that the marginal utility of agricultural surpluses disposed of under Public Law 480 is higher in the receiving than in the donor countries. To the donor surplus agricultural commodities have a relatively low utility because of the storage costs involved. While farm surpluses may be a burden to the donor, they are scarce in the receiving countries, and have a relatively high marginal utility.

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<sup>21</sup>See T.W. Schultz, "Value of United States Farm Surpluses to Underdeveloped Countries," Journal of Farm Economics, Vol. XLII (December, 1960), pp. 1019-1030.



It is concluded that the total utility of agricultural surpluses is increased by virtue of disposal of them to underdeveloped countries.

### Inflationary and Deflationary Effects<sup>22</sup>

In analyzing the question of whether surplus commodities have inflationary or deflationary effects in receiving countries, we will use a hypothetical example. Let us assume that the government concerned has a development plan of 100 million monetary units. It plans to finance the plan internally through taxation, loans and private capital formation of say 75 million and by Central Bank credit (deficit financing) of 25 million. Economic development plans of this type are fairly common in many underdeveloped countries. With an economy at or near the subsistence level, efforts to increase capital formation tends to be inflationary even though some imports are financed by loans or grants from developed countries.

Suppose now that through Title I of Public Law 480 the government obtains 3 million monetary units worth of agricultural commodities that would not otherwise have been imported. These commodities add to the domestic supplies. Sales of them in the open market by the government absorbs part of the purchasing

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<sup>22</sup>The form of presentation in this section is heavily drawn from Earle S. Hoffman, "The Economics of Surplus Disposals," The Australian Journal of Agricultural Economics, Vol. V (September, 1961), pp. 5-7.



power and tends to lessen inflationary pressures.

As stated in Public Law 480, the proceeds obtained are deposited to the United States Government account and are later either used for paying United States obligations or loaned back to the country concerned. However, if these local currencies are spent, it makes little difference if they are spent by the country concerned, or by the United States because the effect on the general price level would be the same. For simplicity we assume that all of the proceeds are used for economic development. After the proceeds have come back to the economy and are respent locally, they nullify the deflationary effects of the original sale, except insofar as their expenditure on development projects has resulted in increased production and deflationary pressures.

If the government reduces the amount of Central Bank credit and uses the proceeds from surplus sales to make it up, the overall plan will be financed as follows (in millions of monetary units):

Taxation, loans and savings	75
Central Bank credit	22
Sales proceeds	3
	<hr/> 100

In such a situation the inflationary pressures are less than before the surpluses were imported as a result of the reduction in deficit financing. Alternatively, the local currency proceeds can be used to replace taxation if the government wishes to do so. But the degree of inflation will maintain at the same level as before.





The plan now becomes (in millions of monetary units):

Taxation, loans and savings	72
Central Bank credit	25
Sales proceeds	<u>3</u>
	100

Furthermore, if the proceeds obtained are employed to expand the plan, the financial situation becomes (in millions of monetary units):

Taxation, loans and savings	75
Central Bank credit	25
Sales proceeds	<u>3</u>
	103

Other things being equal, this type of plan would tend to cause additional inflationary pressures.

There are other points which need to be mentioned. Firstly, there is always a time-lag between the sales of surplus commodities and the spending of the proceeds. Secondly, in many receiving countries local currencies have accumulated in bank accounts with only relatively small portions of the total having been expended. Thirdly, after a certain period of time, productive projects financed by surplus commodities will begin to produce, and this will add to the total output of the economy and have counter-inflationary effects.

#### Rate of Economic Growth

The two major ways in which Public Law 480 commodities can increase economic development are (1) by freeing foreign exchange which would otherwise have been used for food imports (or for means



to produce food) or for other imports such as capital equipment and (2) they may be used to stabilize food prices and to facilitate mobilization of unemployed and underemployed labor by using sales proceeds to finance capital formation, or other projects.

It should be emphasized that one of the limiting factors in economic development in most underdeveloped countries is a shortage of foreign exchange. Because the projects financed by surplus commodities have generally been of the social overhead type, and have a low import content and are labor-intensive and capital-saving such as the construction of roads, dams, drainage canals, etc., it is questionable whether these kinds of projects contribute as much to development as would investment in projects more directly involved in production, such as factories, mines, etc. Such social overhead projects do, however, provide opportunities for development of other industries. But concentration on them tends to slow down the rate of economic growth. Moreover, even the simplest project may need some capital which cannot be domestically produced. In order to make optimum use of surplus commodities, assistance in the form of foreign exchange for unconditional use is considered necessary.

A key consideration in the use of agricultural surpluses in development is whether commodity aid under Public Law 480 is the best way for promoting growth. It is quite obvious that assistance in the form of agricultural commodities involves higher transportation costs per unit of value than capital in the form of



machines, etc., and leave the recipient country with far less flexibility than if straight foreign exchange aid were granted. For the purpose of increasing the growth rate foreign exchange aid is undoubtedly the best because of the greater flexibility it gives to the receiving countries. However, while dollar aid, or any hard currency aid, is better than commodity aid, commodity aid is better than nothing.

### Non-economic Criteria

To evaluate Public Law 480 in terms of its moral aspects, it has to be determined on a purely normative basis. According to an FAO estimate, over one-half of the population of the world is either undernourished or malnourished.<sup>23</sup> In view of this, transferring surplus food from developed countries to underdeveloped countries would definitely increase total welfare, and from a humanitarian point of view, this should be encouraged. However, it should be pointed out that surplus disposal through Public Law 480 cannot form a lasting solution to the problem of diet deficiency. Compared with the total nutritional deficiencies in the world, the amount of food moved under Public Law 480 is rather insignificant.

As stated in Public Law 480, one of its objectives is to foster the foreign policy of the United States. Experience in past years indicates that the United States government does use

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<sup>23</sup>United Nations, Food and Agriculture Organization, Development Through Food (Rome: 1961), p. 1.





surplus commodities as a means of executing its foreign policy, and this tends to lessen the control that a recipient country has over its own affairs. It is impossible to measure the effectiveness of this policy.

### Population and Economic Growth

So far our discussion has assumed a stationary population. What about the danger of a "population explosion" which was discussed in Chapter II? It is frequently argued by experts that rapid population increases in underdeveloped countries may nullify improvements in the level of real income. On the other hand, however, history offers no evidence that economic growth is always associated with sparsely populated places, or with a relatively slow increase in population. In the world there are at present many underdeveloped areas where the population density is low. The main concern with population growth under economic development arises from the proposition that population growth in underdeveloped countries is a function of the level of income. That is to say, as income rises the rate of population growth increases, thereby offsetting the improvement in per capita income. This argument has been challenged by Hagen in his article, "Population and Economic Growth."<sup>24</sup> Hagen shows that, "nowhere in the world has population growth induced by rising income been

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<sup>24</sup>E.E. Hagen, "Population and Economic Growth," American Economic Review, Vol. XLIX (June, 1959), pp. 310-327.



sufficient to halt the rise in income." If we accept Hagen's proposition, a population increase would not be a very serious problem in the future of economic development. If we accept a Malthusian viewpoint, then the problem of population growth should be seriously considered. Under either assumption, however, the situation in underdeveloped countries would be considerably relieved by a relatively slow rate of population growth because increased income is badly needed for reinvestment rather than for consumption for a growing population.

An analysis of the population problem is outside the scope of this thesis. It is therefore assumed that population growth is an exogenous factor, that the rate of population growth is stable from year-to-year, and as a result the labor force bears a constant ratio to the total population.



## CHAPTER V

### EFFECT OF PUBLIC LAW 480 SURPLUSES ON RECEIVING COUNTRIES

Chapter IV provides the theoretical foundation for the use of surplus agricultural commodities as a source of capital to promote economic development in underdeveloped countries. If handled with care, it is possible to accomplish this without interfering with world prices of agricultural products. It has frequently been taken for granted that the use of surplus agricultural food would have a beneficial effect on the underdeveloped receiving countries. It was often argued that the lack of food was one of the most important bottleneck factors impeding the growth of underdeveloped countries. Disposal of surplus commodities by rich countries would therefore be "twice blessed" because it could enable the developing economies to break away from an important constraint while, at the same time, relieving the surplus producing countries of their growing surpluses. Foreign commodity assistance thus became an instrument for presumably harmonizing economic interests of developed and underdeveloped countries alike. However, during recent years the usefulness of the disposal of surplus commodities is being seriously questioned. The "taken-for-granted" argument seems to have swung to the other extreme. Such commodity assistance, it is now sometimes argued, would do positive harm to the long-range interests of the underdeveloped countries themselves.





This view has been ably expressed by T.W. Schultz. He states that:

Not a few countries presently receiving substantial amounts of P.L. 480 farm products are in danger of impairing their agriculture. If this were to happen, it would indeed be serious for them and I would have thought also for us in the long-run.<sup>1</sup>

With regard to the situation in India Andrew Shonfield said: "Some Indians oppose large-scale food imports on the ground that they may actually weaken the incentive to produce more food at home. The short-term remedy, they say, will aggravate the long-term problem."<sup>2</sup> It is evident that further empirical study will be needed in order to evaluate the effects of Public Law 480 surpluses on economic development.

The FAO Washington Sub-committee on Surplus Disposal has made recommendations with regard to the research that is needed to evaluate the effects of agricultural surplus disposals. The FAO has, accordingly, prepared two outlines for such research projects. One covers the studies of surpluses used for economic development,<sup>3</sup> while the other is concerned with the usefulness of surpluses used for emergency and famine relief, and for special

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<sup>1</sup>T.W. Schultz, "Value of U.S. Farm Surpluses to Underdeveloped Countries," Journal of Farm Economics, XLII (December, 1960), pp. 1028-29.

<sup>2</sup>Andrew Shonfield, "Inflation and Economic Growth - III," The Listener (September 14, 1961).

<sup>3</sup>United Nations, Food and Agriculture Organization, Report of the Working Group to Expand Pilot Study Outline (Use of Agricultural Surpluses in Economic Development), Doc. CCP/CDS/58/10 (March, 1958).



feeding programs.<sup>4</sup> These suggested guidelines for research concerning the usefulness of surplus disposals include all aspects of surplus disposal, and require detailed investigation in the recipient countries.

Several studies of the effect of surplus disposals on economic development in selected underdeveloped countries have already been made. These are reviewed below.

### Japan

The first of such studies was made for Japan by Dr. Ojala of the Food and Agriculture Organization.<sup>5</sup> This study analyzed the results of a number of agreements between the United States and Japan for surplus food during 1955 and 1956. During the two-year period Japan concluded two agreements with the United States for the purchase of a total of \$151 million worth of agricultural surpluses under Title I of Public Law 480. The commodities consisted of wheat, barley, rice, cotton, and tobacco. Over three-fourths of the total proceeds acquired from the sales were loaned back to the government of Japan under the provisions of Section 104(g) of Public Law 480. In 1955 the United States also pro-

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<sup>4</sup>United Nations, Food and Agriculture Organization, Report of the Working Group to Expand Pilot Study Outline (Use of Agricultural Surpluses for Emergency/Famine Relief and Special Feeding Programs), Doc. CCP/CSD/58/23 (June, 1958).

<sup>5</sup>United Nations, Food and Agriculture Organization, A Note on the Utilization of Agricultural Surpluses for Economic Development in Japan, Doc. E/CN. 11/L.60 (Bangkok: 1958).



vided about 15 million dollars worth of wheat and non-fat dry milk under Title II for expanding school lunch programs and child welfare activities.

The yen proceeds which the Japanese government derived from the sale of agricultural surpluses represented about seven per cent of the government's resources for investment and loans from 1955 to 1957. The major additional projects on which these funds were used were electric power, irrigation, agricultural and forestry land development, and a number of smaller projects such as marketing facilities, etc. Commercial wheat imports from countries other than the United States were not reduced as a result of the surplus disposal of Public Law 480 commodities.

During the postwar period both the production and per capita consumption of rice increased at the same time that imports and per capita consumption of wheat increased greatly. The demand for wheat bread in Japan has a positive income elasticity.

The over-all effects of utilizing surplus commodities was summarized by Dr. Mordecai Ezekiel in the following:

While the picture is confused by wheat-rice competition and by fluctuations in domestic production, the over-all results thus far in Japan appear favorable to the use of surplus products for economic development, with increased development expenditures, somewhat higher imports from other commercial suppliers, and no marked unfavorable effects on domestic producers. The shift from domestic production of wheat to rice also appears to have been in the direction of greater relative advantage.

Japan is not representative of most underdeveloped countries, having much more industrial development, higher levels per capita of income and production, greater dependence on foreign trade, and is probably better supplied with experienced administrators, technicians, scientists,







and other skilled manpower. Also, it probably has less unemployed or underemployed labor than most underdeveloped countries, although this point was not investigated in the report. That similarly favorable results would be secured in less developed countries cannot, therefore, be taken for granted.<sup>6</sup>

### Pakistan

An appraisal of the effects of Public Law 480 surpluses on Pakistan was prepared by the Joint Agricultural Division of the United Nations Economic Commission for Asia and the Far East and the Food and Agriculture Organization of the United Nations.<sup>7</sup> During the five-year period beginning in 1954 the United States shipped 322 million dollars worth of agricultural commodities to Pakistan under Public Law 480. These included a wide range of foodstuffs, including cotton and tobacco. Almost one-half of the total rupee proceeds was used for aid in economic development of various forms and about 30 per cent was scheduled for common defense. About 22 per cent was retained by the United States for defraying routine obligations. During the same period, both Canada and Australia provided wheat to Pakistan under the Colombo Plan, and all the rupee proceeds from these commodities were earmarked for economic development. The major contribution

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<sup>6</sup>Mordecai Ezekiel, "Apparent Results in Using Surplus Food For Financing Economic Development," Journal of Farm Economics, XXXX (November, 1958), p. 922.

<sup>7</sup>United Nations, Economic Commission for Asia and the Far East, and Food and Agriculture Organization, A Note on the Utilization of Agricultural Surpluses for Economic Development in Pakistan (Bangkok: 1958).



of surplus disposal to economic development in Pakistan lay in providing commodities in strong demand, and this exerted a counter-inflationary influence.

In Pakistan the importation of surplus commodities made possible freeing the economy from various controls. For example, controls on the prices, purchase and distribution of food grains were abolished as a result of the greater supplies made possible because of surplus disposal programs. This has had the effect of increasing incentives to produce, and has resulted in production increasing. In summarizing the effects of surplus disposal on imports, the FAO study concludes:

It seems likely that concessional or aid imports from the United States and other countries replaced a certain amount of commercial trade. But it does not follow that, in the absence of P.L. 480 opportunities, Pakistan would have been able to increase commercial purchases up to the total imports actually received.<sup>8</sup>

### India<sup>9</sup>

India has been the largest surplus receiving country. Commodity assistance to India started in a big way in 1956 under Public Law 480, soon after India's Second Five-Year Plan began. At that time the food deficit in India was a very serious problem

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<sup>8</sup>Ibid., p. 65.

<sup>9</sup>Based largely on S.R. Sen, "Impact and Implications of Foreign Surplus Disposal on Underdeveloped Economies--The Indian Perspective," Journal of Farm Economics, XLII (December, 1960), pp. 1031-1042.



due to short harvests resulting from unfavorable weather. Subsequent to 1956 several additional Title I agreements have been signed. The most important one was signed in May, 1960. This agreement provided for delivery of 16 million tons of wheat and one million tons of rice during the period from 1961 to 1964. Altogether, \$2.4 billion worth of agricultural commodities had been programmed for India as of June 30, 1962.<sup>10</sup> The surpluses which have been shipped to India consist of wheat, rice, cotton, corn, tobacco, grain sorghum and non-fat dry milk.

It is generally agreed that the over-all effects of surplus sales on the Indian economy have been favorable. The surplus commodities received have enabled the Government to combat inflationary pressures by increasing the supply of foodstuffs, and in several cases it has been possible to undertake large development programs that would not have been possible if the inflationary prices had been left unchecked.

In reviewing the impacts of Public Law 480 on the Indian economy, Dr. S.R. Sen stated that:

P.L. 480 supplies have helped considerably to mitigate the shortage in the economy and give protection to a large vulnerable section of the population. For instance, prices of wheat, which comprise the bulk of P.L. 480 supplies, have been prevented from sky-rocketing, even in years of severe shortage. At the same time, there has not been any occasion since P.L. 480 supplies started in 1956 for prices to fall to such a low level as to discour-

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<sup>10</sup>United States Congress, Sixteenth Semiannual Report of Activities Carried on Under Public Law 480, 87th Congress, 2nd Session, House Document No. 526 (Washington: U.S. Government Printing Office, 1962), Appendix, Table 11, p. 72.







age domestic production. The risk that large P.L. 480 supplies of wheat might adversely affect the country's food production was counteracted by the fact that India had a plan for economic development which tended to create additional demand for food. Moreover, purchases made by government in the domestic market at fixed prices for maintaining fair-price shops provided some support to farm prices.

India's purchases from other countries under commercial marketing terms also have not been lower than normal in spite of such large imports under P.L. 480 and substantial increase in production. In fact, India's average annual import of wheat outside P.L. 480 during the period 1956-59 has been 0.44 million tons as against 0.28 million tons in 1955-56. The relative share of wheat in the total amount of cereals consumed in the country has risen from 15 to 20 per cent without any decline in the consumption of other cereals.<sup>11</sup>

#### Israel<sup>12</sup>

In 1959 the Foreign Agricultural Service of the United States Department of Agriculture initiated a systematic review of Public Law 480 activities in receiving countries. Israel was selected as the first country for study, and a detailed study was made by an Israeli economist, in cooperation with consultants of the Foreign Agricultural Service, for the period from 1955 to 1960.<sup>13</sup> Israel is actually not an underdeveloped country like India, Pakistan, or Taiwan because by 1956 net national income in Israel

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<sup>11</sup>Sen, "Impact and Implications of Foreign Surplus Disposal on Underdeveloped Economies--The Indian Perspective," pp. 1034-35.

<sup>12</sup>Based largely on F. Ginor, Analysis and Assessment of the Economic Effect of U.S. Public Law 480, Title I Program in Israel (Tel Aviv: Bank of Israel, 1961).

<sup>13</sup>Ibid.



amounted to almost the equivalent of US\$600 at the official rate of exchange.<sup>14</sup>

Wheat and feed grains accounted for roughly two-thirds of the U.S. shipments totalling \$159 million of Title I commodities to Israel between 1955 and 1960. The funds generated by the sale of these commodities, and made available to Israel in the form of grants and loans, amounted to three per cent of total investments. It is estimated that real gross national product in Israel increased about two per cent between 1955 and 1960 as a result of these expenditures.

Because Israel's limited arable land and high irrigation cost imposed high costs on producing wheat and feed grains, aid in the form of wheat and feed grains permitted a greater expansion of the domestic livestock industry and a quicker relaxation of the rationing of eggs, dairy products, meat and poultry, than would probably otherwise have occurred. Israel's agriculture actually expanded as the result of Public Law 480 imports because these were partly used to expand livestock production. The foreign exchange formerly used to pay for commercial imports of wheat and feed grains was used for the importation of other raw materials. Thus Israel's livestock economy and Israeli consumers benefitted from Public Law 480 shipments of grains even though these grain receipts were not entirely incremental, but at

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<sup>14</sup>This probably overstates the level of income because the Israeli pound is considerably over-valued.



the partial expense of normal commercial imports.

Expenditure of the Israeli currency generally lagged behind the arrivals of the surpluses, and this delay in expenditure served as a counter-inflationary force. It is estimated that the rate of inflation during the six-year period was reduced by about one-fifth as a result of the program.

### Colombia<sup>15</sup>

During the period from 1955 to 1962, Colombian imports under Public Law 480 programs totaled about 100 million dollars, three-fourths of which were under Title I. Wheat, cotton, and edible oils have been the main surplus commodities received by Colombia. The Title I agreements provide that about 26 per cent of the pesos be earmarked for U.S. use, with an additional 16 per cent allocated for "Cooley" loans for private business. The remainder was made available to the Colombian government through grants and loans for economic development under Section 104(g) of Public Law 480.

The effects of Public Law 480 on Colombian agriculture were complex. While there have been no noticeable effects of Title I surpluses on cotton production in Colombia, it was observed that in the absence of Public Law 480 cotton imports, Colombia's aggres-

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<sup>15</sup>Based on L.W. Witt and R.G. Wheeler, Effects of Public Law 480 Programs in Colombia: 1955-62, A Progress Report to the Economic Research Service of the United States Department of Agriculture (Medellin, Columbia: October, 1962).







sive program of self-sufficiency in cotton production might have begun a year earlier. Imports of wheat and flour under Title I have probably resulted in a small shift of acreage from wheat to barley. However, the gross income of wheat farmers has not been adversely affected due to technological improvements in agriculture and increasing productivity. Moreover, the inflow of wheat acted as a counter-inflationary force. No doubt, Colombian consumers have benefitted from lower bread and textile prices which remained relatively stable while the general level of prices increased. As to the effects on trade, the study concludes:

The patterns of trade appear to have been modified by Title I imports. Canada has lost wheat sales to Colombia, both in volume and in proportion. However, many factors besides Title I have affected Canada's ability to compete in exporting wheat to Colombia. Peru lost volume in cotton sales, but maintained roughly the same proportion of the declining volume as did the United States. The United States was able to expand its market share of edible oil sales, but is still a minor factor in the total.<sup>16</sup>

Most of the Title I agreements were made during a period of severe foreign exchange shortages. Thus, it is quite possible that Title I sales have contributed to Colombia's ability to meet internal food needs and to still import capital equipment for economic development. Without Public Law 480 commodities the rate of economic growth and per capita level of income would have been smaller than the actual levels attained, especially after 1958 when Colom-

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<sup>16</sup>Ibid., pp. 164-65.



bia suffered from adverse coffee prices.

### Taiwan

After the Chinese National government removed from the Chinese mainland to Taiwan, United States economic and military aid was granted Taiwan in order to reinforce the military strength of Taiwan as rapidly as possible, and also to contribute to the island's long-range economic development. A total of nearly \$1 billion in mutual security aid was spent on the island between 1951 and 1960, and an additional \$1.7 billion was provided in the form of strictly military assistance.<sup>17</sup>

While in the past few years increasing emphasis has been placed on loans and grants by the United States Development Loan Fund (DLF) with the intention of accelerating domestic investment in Taiwan, U.S. economic aid to Taiwan has been mostly classified as "defense support," of which more than half was granted in the form of agricultural commodities. Substantial sums have also been allocated to technical assistance in agriculture, health, education, industry, labor, housing, engineering and public administration.

United States agricultural commodities have been moved to Taiwan under two independent authorizations; namely, Section 402 of the Mutual Security Act of 1954, and Public Law 480. Both of

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<sup>17</sup>John D. Montgomery, The Politics of Foreign Aid (New York: Praegar, 1962), p. 24.



these authorize the sale of agricultural surplus commodities for local currency. An important feature of aid under Section 402 is that it is included in the annual appropriation for Taiwan. That is, part of U.S. dollar aid under the Mutual Security Programs must be spent by Taiwan for the purchases of United States agricultural surpluses held by the CCC. The emphasis in Public Law 480 is on disposing of United States agricultural surpluses, and while these surpluses may be useful in a limited sort of way in Taiwan's economic development, outright loans or grants, with no stipulations as to their use, would give Taiwan greater flexibility in economic planning. Aid for Taiwan under Section 402 has been declining, but the amount imported through Public Law 480 has been increasing as a result of a change in U.S. foreign aid policy.

Taiwan was not an early participant in Public Law 480 programs. Taiwan did not receive Public Law 480 surpluses until 1956 because U.S. agricultural surpluses were being received under Section 402. Taiwan's later decision to obtain Public Law 480 commodities was caused by continuing population pressures, expanding government expenditures, and plans for accelerated economic development. The first agreement under Title I, Public Law 480, was signed on August 14, 1956. As of June 30, 1962, six agreements have been signed, with a value of \$100 million at market value, including ocean transportation.<sup>18</sup> Nearly all of the

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<sup>18</sup>United States, Congress, Sixteenth Semiannual Report, Appendix, Table 3, p. 60.







scheduled purchases had been completed by the end of 1962. During this period additional quantities of food were obtained under Titles II and III. The value of Title I agreements, and the date on which they were signed are shown in Table 9.

TABLE 9

TITLE I, PUBLIC LAW 480 AGREEMENTS SIGNED BETWEEN U. S.  
AND TAIWAN, JULY 1, 1956-JUNE 30, 1962

Date of Agreement	Value in U. S. dollars (in million) <sup>a</sup>
August 14, 1956	9.3
April 18, 1957	11.8
June 9, 1959	19.4
August 30, 1960	21.2
July 21, 1961	33.1
April 27, 1962	15.5
Total	110.3

<sup>a</sup>Estimated at market value, including ocean transportation.

Source: United States, Congress, Thirteenth through Sixteenth Semiannual Report of Activities Carried on Under Public Law 480 (Washington: U.S. Government Printing Office).

Commodities shipped to Taiwan through Title I consisted of wheat, feed grains, cotton, tobacco, dairy products, and fats and oils. Wheat has been the major product shipped, and constituted more than half the value of all commodities programmed. Cotton has been the next most important commodity, and fats and oils rank third. Data on the commodity composition is given in Table 10.



TABLE 10

QUANTITIES AND VALUE OF COMMODITIES INCLUDED UNDER  
TITLE I AGREEMENTS FOR TAIWAN, 1956-1962

Commodity	Quantity		Value <sup>a</sup> (million dollars)
	unit	amount	
Wheat	1,000 bushels	39,025	56.6
Feed grain	1,000 bushels	656	0.8
Cotton	1,000 bales	195	26.1
Tobacco	1,000 pounds	11,103	9.4
Dairy products	1,000 pounds	5,143	1.6
Fats and Oils	1,000 pounds	64,006	6.5
Total			110.3

<sup>a</sup>Estimated at market value, including ocean transportation.

Source: United States, Congress, Sixteenth Semiannual Report of Activities Carried on Under Public Law 480 (Washington: U.S. Government Printing Office, 1962), Appendix, Tables 3 & 7, pp. 60-65.

After the commodities arrive in Taiwan they are sold in the open market. Part of the proceeds obtained are used by importing agencies to reimburse the United States. This is accomplished by creating the United States' Special Account in the Bank of Taiwan. The use of the Taiwan currency deposited to the United States' account is based on agreement between the two governments. These uses are specified in each Title I agreement negotiated between the United States and Taiwan. The allocation of Taiwan dollar as provided in the agreements is shown in Table 11.

The table shows that over half of the total was authorized for the procurement of military equipment, materials, facilities, and services for common defense. About 22 per cent of the total was allocated for the sole use of the United States. The percen-



tage for United States use would rise to one-third if the loans to private enterprizes of the United States under the "Cooley" amendent were included. Loans to the Chinese Nationalist government accounted for 12 per cent of the total proceeds generated from the sale of surplus commodities. These loans were mainly used to help finance the costs of development, including wages for labor and domestically produced materials. It should be noted that no funds were made available for direct grants for economic development, as is the case in other Public Law 480 receiving countries. This is because a considerable amount of Title I imports are included under the category for common defense.

TABLE 11  
USES OF TAIWAN DOLLARS AS PROVIDED IN  
TITLE I AGREEMENTS, 1956-1962

Item	Total Amount in Agreements (thousand dollars) <sup>a</sup>	Percentage Allocation
Common defense	60,126	53.97
For U.S. Use	24,664	22.14
Loans to private enterprise	13,215	11.86
Loans to Taiwan	13,395	12.13
Total	111,400 <sup>b</sup>	100.00

<sup>a</sup>Based on the deposit rate of exchange and based on market value including ocean transportation.

<sup>b</sup>The total shown in this column differs slightly from the amounts in Table 9 because Table 11 is based on actual purchases while Table 9 is based on agreements to purchase.

Source: United States, Congress, Sixteenth Semiannual Report of Activities Carried on Under Public Law 480 (Washington: U.S. Government Printing Office, 1962), Appendix, Table 11, p. 72.





Compared with total United States economic aid to Taiwan, the Public Law 480 program has been relatively small. Since 1951 United States economic aid, other than in the form of agricultural surpluses obtained under Public Law 480, has averaged \$100 million per year. On the other hand, aid in the form of agricultural surpluses under Public Law 480 has averaged only about \$20 million annually. Since one-third of the proceeds obtained in the sale of these surpluses is retained for United States use, the actual aid to the Chinese government has averaged only \$13 million per year. This is only a little over one-tenth of the total aid.

#### Surplus Imports and Domestic Agriculture

The impact on agricultural production in recipient countries of surplus agricultural commodities imported under provisions of Public Law 480 has been of great concern to development economists. They fear that possible lower agricultural prices will have discouraging effects upon agricultural growth. A related concern is that government authorities in the recipient countries may view the Public Law 480 program as a device which permits deferring agricultural development and lowering the priority for public investment in agriculture. For example, a drop of prices for Title I products in the recipient country would be expected to result in a decline in farm income and shift of acreage from Title I crops to the production of other commodities. Under some circumstances, the effect would be seen primarily as a reduction in



the farm income derived from a commodity which is produced in the recipient country and which is also imported under Public Law 480. Under other circumstances, there could be a sharp decrease in production and large shifts to alternative crops. In other circumstances these effects would be partially concealed, and difficult to discover.<sup>19</sup>

A starting point in examining the commodity impacts of Public Law 480 upon Taiwan's agriculture is to note the extent of these imports relative to the individual domestic production. Table 12 shows this comparison for the period from 1957 through 1961.

TABLE 12

PUBLIC LAW 480 IMPORTS AS RELATED TO DOMESTIC PRODUCTION  
OF WHEAT, COTTON, AND TOBACCO

Year	Domestic production			P.L. 480 imports			P.L. 480 imports <sup>a</sup>		
	wheat	cotton	tobacco	wheat	cotton	tobacco	wheat	cotton	tobacco
	(thousand M.T.)			(thousand M.T.)			(percentage)		
1957	36	-	19	118	-	0.88	327	-	4.6
1958	40	-	17	-	-	-	-	-	-
1959	43	-	16	236	-	1.60	549	-	9.5
1960	46	-	16	235	4.2	1.00	510	-	6.2
1961	69	-	15	248	1.8	-	360	-	-
Total	234		83	837	6.0	3.48	349 <sup>b</sup>		4.1 <sup>b</sup>

<sup>a</sup>As a percentage of domestic production.

<sup>b</sup>Five-year average

Source: United Nations, Economic Commission for Asia and the Near East, Economic Survey of Asia and the Far East, 1961 (Bangkok: 1962), Table 10, pp. 175-76.

<sup>19</sup>Witt and Wheeler, Effects of P.L. 480 Programs in Colombia, Chapter iv, pp. 48-73.



Wheat imports under Public Law 480 ranged from 327 per cent of domestic production in 1957 to 549 per cent in 1959. On the average, wheat imports equaled about 349 per cent of domestic production during the five-year period. Cotton imports under Public Law 480 were very small in quantity, but there is no valid basis for comparing them to domestic production because Taiwan cannot produce cotton. Public Law 480 tobacco shipments were not very significant. They were equal to only 4.1 per cent of the five-year total production.

The Public Law 480 imports did not result in a decline in Taiwan's production of those commodities. Nor was there a significant shift of acreage from Title I crops to the production of other commodities. Moreover, both the planted area and production of wheat have increased in the past years. While wheat is considered as a substitute for rice, there has been no decline in rice production, nor in its acreage. Table 13 shows the change in area and production of rice, wheat, and tobacco. These data do not, however, show what the trend would have been in the absence of Public Law 480 imports.

The continued expansion of rice and wheat production has largely been the result of governmental agricultural policies. The rapid increase of the population, due both to the high rate of natural increase and to the great influx from the Chinese mainland, made the food supply a crucial problem. The Chinese government, on the other hand, has been aware that United States aid is probably a transitional phenomenon. Because of these reasons the







policy of the Government has been to expand the production of basic foods, especially rice. In order to grow enough food to feed its people, and to gradually become independent of United States aid, the Government has tried to stabilize the price of rice from year-to-year, and throughout each marketing year. This was intended to keep both the cost of living and the income of farmers stable. The Government also intervenes, but less than in the case of rice, in fixing the prices of sweet potatoes, wheat, peanuts and soybeans. Farmers are encouraged to produce more of these products and consumers are encouraged to substitute them for rice.

TABLE 13

AREA AND PRODUCTION OF SELECTED AGRICULTURAL COMMODITIES

Year	Rice		Wheat		Tobacco	
	area <sup>a</sup>	production <sup>b</sup>	area <sup>a</sup>	production <sup>b</sup>	area <sup>a</sup>	production <sup>b</sup>
1957	783	2,287	20	36	10	19
1958	778	2,356	23	40	9	17
1959	776	2,308	23	43	8	16
1960	766	2,505	25	46	8	16
1961	825	2,550	34	69	-	-

<sup>a</sup>In 1,000 hectares.

<sup>b</sup>In 1,000 metric tons.

Source: United Nations, Economic Commission for Asia and the Far East, Economic Survey of Asia and the Far East, 1961 (Bangkok: 1962), Table 10, pp. 175-76.

The production, marketing and manufacture of tobacco is under the exclusive control of the Provincial Tobacco and Wine Monopoly Bureau. Tobacco growing requires a permit from this Bureau. The growers are required to sell all leaf tobacco to the Bureau at the



fixed prices set by the Provincial government. Because of the strict control over tobacco production, and the insignificant amount imported under Public Law 480, the declining trend in tobacco production shown in Table 13 is probably due to a greater profitability of growing other crops.

During the past several years Public Law 480 imports did not cause a fall in food prices, as might have been expected. This was probably because the general level of prices in Taiwan has been increasing due to inflationary pressures. Although the Government has tried to maintain stable food prices in order to prevent the cost of living from increasing, thereby facilitating development programs, food prices actually rose as fast as the general level of prices. This is shown in Table 14. In the absence of Public Law 480 imports the increase in the level of food prices would undoubtedly have been more pronounced.

TABLE 14  
INDEX NUMBERS OF GENERAL AND FOOD PRICES  
1958=100

	1955	1956	1957	1958	1959	1960	1961
General index	76	88	97	100	111	131	141
Food price indeces	80	87	95	100	113	137	143

Source: International Monetary Fund, International Financial Statistics, Vol. XVI (July, 1963), pp. 80-83.

United Nations, Economic Commission for Asia and the Far East, Economic Survey of Asia and the Far East, 1962 (New York: 1963), Table 26, p. 221.



The sizable increase in the production of rice and wheat, as shown in Table 13, indicates that Title I imports of these commodities probably had only minor effects on domestic production. The ratio of prices received by farmers to prices paid have been relatively stable, as shown by Table 15.

TABLE 15  
INDEX NUMBERS OF PRICES RECEIVED AND PAID BY FARMERS  
1958=100

	1956	1957	1958	1959	1960	1961
Prices received by farmers	90	100	100	111	155	159
Prices paid by farmers	93	99	100	110	149	156
Ratio of prices received to prices paid	97	101	100	101	104	102

Source: United Nations, Economic Commission for Asia and the Far East, Economic Survey of Asia and the Far East, 1962 (New York: 1963), Table 27, p. 222.

On balance, governmental policies in Taiwan have probably tended to mitigate any harmful impact on domestic agriculture resulting from Public Law 480 imports. In addition, increased yields resulting from technological advances have tended to maintain farm income. A rapidly increasing demand for food has tended to maintain agricultural prices, and this has served to maintain incentives to produce. There is, therefore, little evidence, if any, that Public Law 480 imports have had any harmful effects on Taiwan's agriculture.







Effects of Public Law 480 on Food Consumption

The consumption of food is determined by the availability of food items (completeness of the marketing system), food preferences, by per capita incomes, relative prices, and population. The basic foods in Taiwan are rice, sweet potatoes, and wheat. The consumption of wheat is very small compared to rice and sweet potatoes. Leafy green vegetables are abundant as the subtropical weather favors their growth. The ratio of animal protein in the diet is well above most countries of the Far East.

The most recent year for which data on the consumption of food in Taiwan is available is 1958.<sup>20</sup> In 1958 the daily calorie consumption per capita amounted to 2,340. Of this amount 1,310 calories were from rice. Wheat and sweet potatoes accounted for another 190 calories each. Meat accounted for 145 calories and sugar for 135. Other foods accounted for relatively little individually, and as a total accounted for only 370 calories. Farm families generally consume more starchy foods than non-farm people who generally consume more animal products because of higher incomes in urban areas. In 1956 farm families consumed 443 grams of rice per capita daily while the non-farm consumption was 356 grams. Farm families consumed 211 grams per capita daily of sweet potatoes while non-farm families consumed only 20 grams per capita. The per capita consumption of wheat flour by farm families amounted to only one gram daily, while non-farm families

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<sup>20</sup>United States, Department of Agriculture, Food Problems in Foreign Countries (October, 1960), Table 13, p. 13.



consumed 11 times as much.<sup>21</sup> There is little up-to-date information on the actual consumption level of food in Taiwan and, therefore, it is difficult to say what effect of Public Law 480 imports has been on Taiwan's food consumption pattern. However, it is probably fair to say that the proportion of wheat in the daily diet has been increased as a result of imported wheat under Public Law 480, and that the change in diet might be more likely in the urban than in the rural areas.

#### Effects of Public Law 480 on Foreign Trade and Balance of Payments

The export trade of Taiwan is dominated by sugar and rice. Sugar and rice together usually accounted for more than 75 per cent of the total exports before 1957. This percentage declined to 46 per cent by 1961.<sup>22</sup> At the same time, the share of industrial products in total exports has risen in recent years. Taiwan's import trade is dominated by imports of capital goods, and Japan and the United States are Taiwan's chief trading partners.

From 1956 to 1960 Taiwan exported 605,532 metric tons of rice and imported 837,183 tons of wheat under Title I agreements (Table 16). The rice exports were made possible by imports of wheat under Public Law 480 because they freed rice for export,

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<sup>21</sup>Sing-min Yeh, Per Capita Consumption Level of Basic Food in Taiwan (Taiwan: Sino-United States Joint Commission on Rural Reconstruction, 1957).

<sup>22</sup>China Yearbook 1961-1962 (Taiwan: China Publishing Co.), p. 350.



which otherwise would have been consumed domestically. All the rice was exported to Japan with whom Taiwan has a balance of payments problem. Moreover, in the absence of heavy wheat imports Taiwan might even have had to import rice from abroad, or would have had to shift acreage from the production of other crops to rice.

TABLE 16  
QUANTITATIVE COMPARISON BETWEEN RICE EXPORTS AND  
PUBLIC LAW 480 WHEAT IMPORTS

Year	Rice exports (M.T.)	Wheat imported through P.L. 480 (M.T.)
1956	109,199	-
1957	121,793	117,866
1958	179,310	236,434
1959	160,190	234,783
1960	35,040	248,100
Total	605,532	837,183

Source: China Yearbook 1961-1962 (Taiwan: China Publishing Co.),  
p. 399.

In addition to freeing rice for export, Taiwan dollars generated from Title I sales have been used to finance improvements of the production of pineapples, bananas, and mushrooms, all of which are primarily produced for export. Part of Public Law 480 funds have been loaned to develop the chemical fertilizer industry, and this tended to reduce the drain on foreign exchange by reducing fertilizer and food imports, in addition to increasing domestic agricultural production, thereby making Taiwan more competitive





in world export markets.

Another effect on the availability of foreign exchange resulted from the use of Public Law 480 currency to meet the obligations of United States government agencies in Taiwan. About one-third of the Taiwan dollars obtained by the United States for Title I sales was retained by the United States to meet its normal expenditures in Taiwan. Since, in the absence of Title I sales these United States expenditures would have been made anyway, such use of Taiwan dollars resulted in some reduction in Taiwan's foreign exchange earnings.

#### The effect of Public Law 480 on Economic Development

Total United States economic aid in its various forms has been one of the most important sources of capital in Taiwan's economy. According to official Chinese statistics, United States economic aid, including direct dollar aid and commodity aid, was equal to 27 per cent of Taiwan's total fixed capital formation since the period from 1952 through 1960. However, the value of P.L. 480 commodities obtained by Taiwan accounted for only one-tenth of the total United States aid, and in view of the relatively small amounts of Title I commodities made available for economic development, they probably have not had a very significant effect. Nevertheless, inflation has been a major problem in Taiwan, and the imports of food have had a counter-inflationary effect, and this has probably had a positive effect on economic development.



Though the inflationary forces have weakened considerably in recent years, the potential inflationary threat is still there. In the past ten years the annual rate of inflation has averaged about 10 per cent. The change in the general price level is shown in Table 17.

TABLE 17  
INDEX OF GENERAL PRICE LEVEL IN TAIWAN,  
1953 THROUGH 1961

Year	Index of general price level (1958=100)
1953	68
1954	70
1955	76
1956	88
1957	97
1958	100
1959	111
1960	131
1961	141

Source: International Monetary Fund, International Financial Statistics, Vol. XVI (July, 1963), pp. 80-83.

Due to the persistent increase in the general price level the introduction of additional commodities into Taiwan's economy under Public Law 480 probably had the effect of stabilizing the price for these commodities and their close substitutes.

Since the major share of Title I loans to Taiwan was made for agricultural development projects, these expenditures on capital creation projects in rural areas is likely to permit more



effective employment of workers who are generally underemployed, and this will add to total output.

Loans have also been made for industrial projects, but they are in connection with other aid programs and the effect of Public Law 480 aid on them is not clear at all. However, the cotton imported under Public Law 480 has greatly helped develop Taiwan's textile industry. Wheat imported under Public Law 480 encouraged the rise of a milling industry which was non-existent before World War II.

In summary, Public Law 480 commodities have contributed only a fraction of the total economic aid received for investment in Taiwan. Moreover, Title I food aid cannot claim credit for any identifiable part of Taiwan's development program, but only a proportionate part of the total. In addition, this proportionate part cannot be objectively measured because the total investment activated by Title I aid cannot be measured. The contribution of Title I aid to investment is not the sole criterion of its possible contribution to economic growth. The value of Title I food as a check to inflation and as substitute for rice which made rice exports possible, added greatly to Taiwan's foreign exchange earnings and contributed to the sustained growth of Taiwan's economy.





## CHAPTER VI

### CONCLUSION: SURPLUS FOOD AND ECONOMIC DEVELOPMENT

Aid in the form of surplus agricultural commodities is not necessarily helpful in economic development. Care must be taken to assume that such aid will promote development, and that it will not serve as a hindrance by acting as a substitute for increasing domestic production. Past experience with such aid has revealed several problems and basic defects which have limited the usefulness of Public Law 480 as a means of channeling surplus food into economic development in Taiwan. Some of these difficulties stem from the basic objectives of the existing method of surplus disposal, and others are of a procedural nature. Some concern the donor country, while others are related to the recipient country, such as Taiwan.

#### From Project to Program

The Public Law 480 agreements between the United States and Taiwan were made on a year-to-year basis. As a general rule, the Public Law 480 aid was used as supplements to other United States economic aid, and was not included in Taiwan's over-all economic development plans. The approach was designed for financing specified projects rather than part of a coherent development program.

The difference between a "program approach" and a "project approach" is that a program approach is the broader concept of the two. A project approach is a project-by-project approach with



little or no attempt at coordination. A program approach is an attempt to coordinate a number of development projects. The theoretical advantage of the program approach is that "balanced" development is more efficient. According to the proponents of this approach, it is only when the recipient country has a balanced program for industrial and agricultural development, which is designed to create additional employment and purchasing power, that the effects of surplus disposal will become truly beneficial. Any given project may or may not be a substitute for another project which would otherwise have been undertaken. It may merely change the composition of investment rather than increase the total amount of investment. It is, thus, difficult to say when and whether a given single project represents additional investment. It is quite practicable on the other hand to estimate the increase in the total amount of investment under a program approach.

Because many worthwhile projects require up to about five years to complete, the assurance of continued aid is essential for long-term projects of this type. For projects of this type the additional labor employed, and income generated, will require additional food for several years before the projects are completed and start producing. If the commodity assistance is made on a year-to-year basis, there will be considerable uncertainty about the inflow of surplus food in subsequent years. This uncertainty may lead to distortions in the over-all plan for development. In most projects only a part of the cost can be met by surplus commodities, and if the entire cost of a given project (including



food imported at world prices) has to be provided from the scarce resources of the country itself, this tends to upset its other important programs.

Based on the above, the following steps, which the government in Taiwan should take in order to use surplus commodities more efficiently in its economic development, are suggested:

(1) The Public Law 480 assistance should be made on a program basis and not on a project basis, and should be integrated with the over-all plan for national development.

(2) The program should continue for a certain minimum period and should not be stopped half-way.

With regard to the first step, the Chinese government in Taiwan should estimate the approximate amount of surpluses needed in order to implement its entire development program which consists of a number of projects. This estimate should be based on the best available estimate of the future demand for, and domestic supply of, agricultural commodities. As to the second step, the government should try to obtain a four-year Public Law 480 commitment with the amount to be obtained each year specified. This would enable the Government to allocate its resources in an optimum way, especially for those projects which are dependent upon surplus commodities for financing. A four-year period is recommended because Taiwan's economic Plans are for a four-year period.

The above should not, however, be construed to mean that all project approaches should be ruled out in all cases. Relatively







small projects may often be started without undue concern about the effect on the economy as a whole. But even in such cases, it would be desirable to incorporate these specific projects into an over-all program of economic development at the earliest possible opportunity. Planning and programming do not guarantee progress. Nevertheless, development programs "provide a framework within which the country can think in an orderly way about its economic future."<sup>1</sup>

#### Commodity Assistance and Dollar Aid

There are some aspects of the surplus disposal policy adopted by the United States which are to its credit. There are, however, a few other aspects which are causing concern. For instance, there seems to be a growing risk that both the people in the donor and the recipient countries may be misled and may think that food aid is a perfect substitute for dollar aid. If this develops, the consequences would be unfortunate. The likelihood of this happening is increased by the accounting system used by the United States Bureau of the Budget in which commodity assistance programs are valued in terms of dollars, and are presented as being dollar aid. According to a calculation by Professor Schultz, a dollar's worth of aid in the form of agricultural commodity aid is worth about 37 cents in terms of actual dollar credits. The

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<sup>1</sup>Robert E. Asher, Loans and Local Currencies: Their Role in Foreign Aid (Washington: Brookings Institution, 1961), p. 83.



accounting practice of classifying commodity aid as dollar aid may create a feeling of complacency in the donor country, and this may have the effect of slowing down the direct foreign exchange assistance which the underdeveloped countries so badly need.

While commodity assistance is helpful, it must be emphasized that its effectiveness is partly lost if it is not backed by adequate supply of foreign exchange. If the commodity assistance that the underdeveloped countries are receiving is not supplemented by foreign exchange aid their economic development will not grow as expected because even the most labor-intensive projects need some equipments which cannot be locally produced. On the other hand, if dollar aid is available, their economic development will be accelerated and they will be able not only to absorb the supplies which they have contracted for, but even to import more in the future. This line of reasoning is based on the fact that most of the underdeveloped countries suffer from shortages of foreign exchange with which to finance the imports of capital needed for development projects in which local currency from Title I sales is being used. Even under the most favorable conditions for the absorption of local materials and skills, nearly all development projects will need supplementary funds in the form of hard currency for importing machinery and sometimes for technical assistance. The present system of surplus disposal does not pay any attention to the solution of this obvious and serious bottleneck. We therefore suggest that necessary measures



be taken to integrate the disposal of surpluses with United States foreign policy so that commodity assistance and its required dollar aid could be coordinated, thereby enhancing the effectiveness of commodity aid.

#### Adjustment of Local Currency Uses

Another problem which arises in connection with the utilization of Public Law 480 commodities in Taiwan is the use of Taiwan currency acquired from surplus sales. One-fourth of these funds are used by the United States in meeting its obligations incurred in Taiwan, and as such these local funds substitute for United States dollars. Because these expenditures would have had to be met in any case (with United States dollars), we may conclude that the utilization of Taiwan currency in this connection deprives Taiwan of the dollar expenditures which the United States would have made in the absence of surplus disposal. In view of the urgent and great need which Taiwan has for dollar reserves, the effect of United States substitution of local currency for dollar expenditures has a negative effect on Taiwan's economy and balance of payments.

#### Effect of Time Lag

Another problem is the question of time-lag. This concerns the long period that normally elapses between the signing of the sales agreement, shipment of the surplus commodities, and the final availability of loans from Title I funds for economic develop-







ment. Such time lags tend to work against the concept of using surplus food for investment. The undesirable time-lag is primarily the result of long and complicated procedures which are now followed in initiating, negotiating, and concluding sales and loan agreements. A great deal of time is spent in negotiating the terms of the sales agreement. Once the sales agreement is concluded there is a lengthy process involved in purchasing the commodities, arranging for their shipment, and in carrying out the financial transactions through private trade channels and the banking system. After the conclusion of the sale agreements, AID and the Chinese government usually spend a great deal of time in negotiating loans for the promotion of economic development.

In order to shorten the time between the sale agreement and actual allocation of Title I currency for development projects, it is recommended that the Chinese government prepare plans, along with several alternative plans, for such uses of Title I funds. These plans could be forwarded to the United States government, along with the application for the purchase of surplus commodities under Public Law 480. This would save time when the application is considered by the United States officials.

#### Need for Title II Imports

Another shortcoming in the use of Public Law 480 commodities in economic development is that much of the food imported under Title I of Public Law 480 does not reach the hungry in Taiwan.



Since Title I food is purchased by consumers in normal commercial outlets, this use of the market mechanism thwarts getting the food to those in greatest need. In order to benefit these people, Taiwan ought to apply for surplus agricultural products under Title II for economic development. Imports through this authorization are made as grants and can be used for payment of wages in kind for work performed by needy people on relatively simple public work projects.

### Opportunities for Using Surplus Food

The absorptive capacity of a developing economy for surplus commodities depends largely on the level of unemployment and underemployment of labor, the level of nutrition of the people, its needs for various forms of social overhead capital, and its level of domestic agricultural production. Although it is difficult to evaluate the level of each factor, it is quite evident that Taiwan's economy could probably absorb substantial quantities of surplus food to help improve nutritional standards and increase the rate of investment for economic development.

The optimum amount of surplus commodities which could be absorbed by Taiwan is not easy to estimate due to a scarcity of quantitative information. Ezekiel's study in 1955 estimated that from 30 to 50 per cent of additional development projects in India could be financed through agricultural surpluses.<sup>2</sup> This

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<sup>2</sup>United Nations, Food and Agriculture Organization, Use of Agricultural Surpluses to Finance Economic Development in Underdeveloped Countries: A Pilot Study in India, Commodity Policy Studies No. 6 (Rome: 1955), p. 10.



estimate was largely speculative, and subsequent further experience indicated that surplus commodities cannot contribute this much. In 1961 a group of economists were invited by FAO to propose a strategy for the utilization of surpluses. This study group came up with the following estimate.

The utilization of food aid for the purpose of general economic development will depend on the availability as aid of resources other than food. It is estimated that food aid for economic development alone could not be expected to amount to more than one-sixth to one-fifth of the total capital aid required by underdeveloped countries. In certain countries this proportion might be more, in others less.<sup>3</sup>

This estimate seems to be more relevant to the case of Taiwan, and gives us a guide line for making a rough estimate. Since 1952 Taiwan has received about \$100 million in economic aid per year. If we take one-fifth as the standard, the optimum amount of United States surplus commodities would be \$20 million. This figure is very close to the actual amount received by Taiwan since it started to obtain Public Law 480 imports in 1956, and it appears that shipments of this order, or somewhat larger, could be utilized in the future. It should be noted, however, that a large proportion of the population has a very low preference for the wheat which is imported under Public Law 480. This may hamper Taiwan's absorptive capacity for larger shipments of surplus food. Unless total aid is increased, or the pattern of consumption is greatly changed, the prospects for a greatly expanded use of surplus food for economic development appear limited.

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<sup>3</sup>United Nations, Food and Agriculture Organization, Development Through Food: A Strategy for Surplus Utilization (Rome: 1961), p. 3.







Development of Marginal Land With Retired Servicemen

Thirteen years have elapsed since the military forces of the Chinese Nationalist government arrived on Taiwan. Many of these have retired because the Government embarked on a policy of maintaining a relatively young military force. The majority of the retired servicemen do not have a home in Taiwan, and the task of resettling them has become a very challenging problem, especially since many of them are still young enough to perform active work for a number of years. Government assistance to veterans is diversified. One of them is to employ them for developing new land.

Most of Taiwan is mountainous, and most of the arable land is being cultivated. But there are tidal lands along the west coast, and swamp lands in eastern Taiwan, which could be reclaimed for cultivation. The opportunity of using retired servicemen for this purpose is very promising because it would be labor intensive. Although it is helpful to have some equipment to work with, the reclamation could be carried out by labor with simple tools such as shovels, wheelbarrows, carts and hoists. Imported earth-moving equipment is not required. Financing could be largely supplied by local currency acquired from sales of Public Law 480 commodities. After these lands have started to produce food they could be sold to the retired servicemen who take part in the development. In this way the land development project would not only increase the total productivity of the nation, but also solve a big employment problem.



### Livestock Industries

The development of livestock industries is an instance of long-term investment in agriculture. It is singled out for special mention for several reasons. First is the fact that diets in Taiwan are seriously deficient in animal proteins. The supply of livestock products is presently increasing barely as fast as the population. The second factor is the availability, at least for a transitional period, of large surplus stocks of feed grains, mainly maize and millet, in the United States.

There appear to be several ways in which surplus feed grains could be used to promote improvements in livestock production. In Taiwan most of the land is used to grow grains for human consumption, leaving little for grazing purposes. Although efforts have been made to expand the grazing area in recent years, it has not been very successful. Imported feed grains under Public Law 480 would offer an opportunity for establishing new or expanding livestock industries. On the other hand, if outside supplies of grains could be pledged to come in for a long period, farmers could return marginal lands for livestock production. Taiwan has a large cattle population, but their productivity is low because of poor feeding practices. The addition of small quantities of feed grains to cattle rations would greatly increase output. Similarly, the poultry industry might be stimulated.



### Development and Utilization of Highland Resources

Vigorous steps should be taken to encourage farmers to resort to more intensive cultivation of tea, bananas, and other crops planted on mountain slopes or foothills. Efforts should also be made to exploit economic potentials of marginal lands by planting fruit trees adaptable to a temperate climate, and by cultivation of medicinal herbs. To a large extent, Title I loans would be helpful.

### Improvement and Development of Irrigation

Due to the limited arable land, expansion of Taiwan's agricultural production is greatly dependent on increasing yields. One of the most effective ways to increase per unit output would be to expand the irrigated area. This could be accomplished by the development of potential water resources. In addition, the existing irrigation facilities require continued improvement and regular maintainance. There is a lot of work to be done, and it could be financed by surplus commodities, and it could be carried out by unemployed rural labor. Surplus commodities obtained as grants through Title II could be used for this purpose and wages could be paid in kind.

### Social Development Programs

The development projects which were described above would generate direct economic benefits. However, overall economic development calls for the coordination of an appropriate social development program. Inasmuch as such development is very broad in







scope, projects such as training for technicians, public health programs, urban development programs, and national housing projects, are generally considered as suitable for financing with funds generated under Title I.

In recent years the foreign aid policy of the United States has changed, and indicates two obvious trends: (1) to help those countries which are ready to help themselves, and (2) to manage its assistance programs on bankers' principles.<sup>4</sup> Selectivity, therefore, is now a key consideration in foreign policy. Those countries which are willing to make a major self-help effort will be selected for developmental projects. The policy will be to give sufficient assistance to those countries in order to enable them to make headway toward self-sustaining growth. In fiscal year 1964, for example, 80 per cent of all economic assistance is to be concentrated in 20 countries.

It is obvious that in the past it has not been possible for the United States to manage its assistance programs on bankers' principles, but it is in this direction that new programs are aimed. The importance of loans, as opposed to grants, is growing. In the fiscal year 1964, for example, loans will comprise 60 per cent of total economic assistance. The Chinese government in Taiwan needs to take these changes into consideration, and this includes plans for the future utilization of surplus commodities.

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<sup>4</sup>Dean Rusk, "The Foreign Aid Program," The Department of State Bulletin (Washington: April 29, 1963), p. 668.



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